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[Env-Ws 1000](#)

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

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CHAPTER Env-Ws 1000 SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL  
SYSTEM DESIGN RULES

**REVISION NOTE I:**

Document #4926, effective 9-5-90, renumbered and readopted with amendments the rules in former Chapter Ws 1000 and the rules in Chapter Env-Ws 1000, except for the rules in Parts Env-Ws 1025, 1026, 1027 and 1028. These parts were not included in Document #4926, but were noted in earlier documents noted in the source notes to these rules. The rules in former Chapter Ws 1000 have therefore been amended and incorporated into Chapter Env-Ws 1000 by Document #4926. Document #4926 superseded all prior filings for the rules in Chapter Ws 1000 as well as in Chapter Env-Ws 1000 except for those rules in Parts Env-Ws 1025, 1026, 1027 and 1028. Document #4926 reserved Chapter Env-Ws 1024 for future rulemaking. The prior filings for rules now contained in Env-Ws 1001 through 1023 include the following documents:

#611, eff 2-10-75      #2842, eff 9-5-84

#1144, eff 4-19-78      #4202, eff 1-9-87

#1382, eff 6-10-79      #4255, eff 4-14-87

#1705, eff 1-1-81      #4608, eff 5-1-89

#1729, eff 3-15-81      #4621, eff 6-1-89

#2165, eff 1-1-83      #4841, eff 6-19-90

**REVISION NOTE II:**

Document #7079, effective 8-26-99, renumbered and readopted with amendments the rules in Chapter Env-Ws 1000. Document #7079, effective 8-26-99 supersedes all prior filings for the rules in Chapter Env-Ws 1000. The prior filings for rules now contained in Env-Ws 1000 include the following documents:

#4926, eff 9-5-90

#6329, INTERIM, eff 9-6-96, EXPIRED: 1-4-97

#5424, eff 6-24-92

#6421-A, EMERGENCY, eff 1-7-97

#6451, eff 2-8-97

The following sections are new rules adopted in Document #7079, effective 8-26-99

Env-Ws 1002.03 through Env- Ws 1002.07	Env-Ws 1002.36
Env- Ws 1002.13	Env-Ws 1002.37
Env- Ws 1002.19	Env-Ws 1002.39
Env- Ws 1002.22	Env-Ws 1002.41
Env- Ws 1002.25	Env-Ws 1002.42
Env- Ws 1002.27	Env-Ws 1002.46
Env- Ws 1002.29	Env-Ws 1002.49
Env- Ws 1002.30	Env-Ws 1002.53
Env-Ws 1002.33	Env-Ws 1004.15
Env-Ws 1002.36	Env-Ws 1014.02

Statutory Authority: RSA 485-A:4, 29, 30-b, 35, 38, 39, and 41

#### PART Env-Ws 1001 INTRODUCTION

Env-Ws 1001.01 Purpose. In addition to the purposes stated in RSA 485-A:1, the purpose of these rules shall be to prevent pollution of all public or private water supplies, whether underground or surface sources.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #7079, eff 8-26-99

#### Env-Ws 1001.02 Waivers.

(a) The rules contained in this chapter are intended to apply to a variety of conditions and uses. It is recognized that strict compliance with all rules prescribed herein may cause hardship or not fit every conceivable situation. The purpose of this section shall be to accommodate those situations.

(b) Any application filed pursuant to these rules may include one or more requests for a waiver of specific rules outlined in the chapter as set forth in this section:

(c) All requests for waivers, including requests for encroachment waivers as defined by RSA 485-A:2, III-a, shall be submitted to the department pursuant to RSA 485-A:41, IV.

(d) Each applicant's request for a waiver shall include the following information:

- (1) A specific reference to the section of the rule for which a waiver is being sought;
  - (2) A full explanation of why a waiver is necessary and demonstration of hardship caused if the rule is adhered to;
  - (3) A full explanation of the alternatives for which a waiver is sought, with backup calculations and data for support; and
  - (4) A full explanation of how the grant of the waiver is consistent with the intent of RSA 485-A.
- (e) The department shall approve a request for waiver upon finding that:
- (1) The alternatives proposed are at least equivalent to the specific requirements contained in the rule; or
  - (2) If the alternatives proposed are not equivalent to the requirements contained in the rule, they are adequate to ensure that the intent of RSA 485-A is met.
- (f) Waivers shall be granted in writing as part of the approval, shall expire with the approval and shall be transferable with the approval.
- (g) A formal waiver request form shall be completed by the applicant which contains all of the above requirements. The owner shall co-sign and acknowledge agreement and consent to all waiver requests.
- (h) The department shall deny a request for waiver upon finding that:
- (1) The alternatives proposed are not equivalent to the specific requirements contained in the rule; or
  - (2) The alternatives proposed are not adequate to ensure that the intent of RSA 485-A is met.
- (i) Waivers shall be denied in writing as part of the denial of the application.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1002 CHAPTER DEFINITIONS

Env-Ws 1002.01 "Aeration tank" means a tank in which wastewater is brought into contact with air for the purposes of facilitating biological degradation.

Source. (See Revision Note at chapter heading for

Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1002.02 "Approved plans and specifications" means the approved plan, the construction approval, the operation approval, and the maintenance pamphlet published by the department, "You and Your Septic System".

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1002.03 "Aquic conditions" means soils which currently experience continuous or periodic saturation and reduction, and is indicated by redoximorphic features and can be verified, except in artificially drained soils, by measuring saturation and reduction.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.04 "B horizon" means a layer of soil or soil material approximately parallel to the land surface that forms below an A,E, or O horizon.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.05 "Bs horizon" means a B horizon with an accumulation of illuvial, amorphous, dispersible organic matter and sesquioxides.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.06 "Bh or Bhs horizon" means a B horizon with an accumulation of illuvial, amorphous, dispersible organic matter and sesquioxides. The sesquioxide component coats sand and silt particles. The

symbol "h" is used in combination with "s" as Bhs if the amount of sesquioxide component is significant but value and chroma of the horizon are 3 or less.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.07 "Biomat interface" means a bacterial layer that forms between the bottom of the EDS and the fill material or receiving layer.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.08 "Cesspool" means an underground pit into which is discharged raw or partially-treated sewage or other essentially untreated wastes and from which the liquid seeps or leaches into the surrounding soil. The term includes cesspit or effluent disposal cesspool.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.03)

Env-Ws 1002.09 "Chamber system" means an effluent disposal system constructed of preformed, interconnected, open bottom units, providing effluent storage space and mechanical support for the soil overburden.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.08); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.04)

Env-Ws 1002.10 "Chroma" means the relative purity or saturation of a color, or its intensity of distinctive hue as related to grayness. Chroma is one of the 3 variables of color.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.09); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(2))

Env-Ws 1002.11 "Cluster subdivision" means a purely residential subdivision of a tract of land, where a number of housing units are clustered on lots with dimensions and frontages reduced from minimum lot sizes required by Env-Ws 1005.03 and are serviced by an approved community or municipal water system, and

where the dwelling unit density of the tract as a whole is equal to the density achieved by the lot sizing criteria of Env-Ws 1005.03 based on soil types and slopes and the remaining land is dedicated to open space.

Source. (See Revision Note at chapter heading for

Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.10); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.05)

Env-Ws 1002.12 "Commercial building" means any building or group of buildings other than a single or 2 family private residence(s).

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1002.105); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.06)

Env-Ws 1002.13 "Composite average slope" means the measurement of an incline by a single value that represents the average of a set of unequal values.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.14 "Construction approval" means written approval for construction of planned or proposed sewage disposal systems under RSA 485-A:32, I.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.12); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.07)

Env-Ws 1002.15 "Department" means the department of environmental services.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.13); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.08)

Env-Ws 1002.16 "Department staff" means any employee or agent of the department authorized

by the department to review and discuss preliminary plans and development plans, to advise on modifications, and to approve plans and sewage treatment installations for the department.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1002.135); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.11)

Env-Ws 1002.17 "Design intent" means a statement of actual bottom elevation of the EDA in relation to an established reference elevation on site, in accordance with Env-Ws 1003.06(af).

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.14); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.09)

Env-Ws 1002.18 "Developed waterfront property" means "developed waterfront property" as defined in RSA 485-A:2, and includes property upon which a structure previously stood but which has burned or has otherwise been demolished.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.15); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.10)

Env-Ws 1002.19 "Domicile" means that place where a person has his or her true, fixed, and permanent home and principal establishment, and to which whenever he or she is absent he or she has the intention of returning. A person might have more than one residence, but only one domicile.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.20 "Drainage swale" means a vegetated area where waters flow to such a limited extent that neither channels nor wetlands vegetation develop.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.17); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.12)

Env-Ws 1002.21 "Dry well" means a sewage disposal area constructed as a covered, underground pit with open-jointed lining, surrounded with septic stone, into which settled or other treated wastes are discharged for final disposal into the surrounding soil. The term includes seepage pit and effluent disposal pit.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.18); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.13)

Env-Ws 1002.22 "E horizon" means an eluvial, mineral soil horizon in which the main feature is loss of silicate clay, iron, or aluminum, or some combination of these, leaving a concentration of sand and silt particles.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.23 "Effluent" means the liquid which overflows or flows out from a septic tank or equivalent.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.20); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.14)

Env-Ws 1002.24 "Effluent disposal area" or "EDA" means a sewage disposal area designed for the final disposal of septic tank effluent.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.21); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.25)

Env-Ws 1002.25 "Effluent disposal system" or "EDS" means all components used to convey and/or treat effluent, including all methods used to distribute effluent into the EDA.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.26 "Encroachment waiver" means a waiver of the design specification rules of Env-Ws 1000 et seq. which, if granted, would limit the ability of an owner of an abutting property to fully use his property for purposes of development. For purposes of this definition, "development" includes changes or

additions to existing structures as well as construction of new structures, whether commercial or non-commercial.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.23); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.15)

Env-Ws 1002.27 "Expansion" means an increase in the design flow from a given structure, based on Table 1008-1, over the existing design flow.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.28 "Failure" means "failure" as defined in RSA 485-A:2, IV, namely "the condition produced when a subsurface sewage or waste disposal system does not properly contain or treat sewage or causes or threatens to cause the discharge of sewage on the ground surface or into adjacent surface or ground waters."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1002.236, originally #6383, eff 11-26-96); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.16)

Env-Ws 1002.29 "Free of fines" means free of small particles such as silts or clay.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.30 "Gleyed matrix" means a history of prolonged periods of wetness and refers to the volume of a soil horizon or subhorizon where iron has been reduced and removed, or where saturation with stagnant water has preserved a reduced state.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.31 "GPD" means gallons per day of water or wastewater flow.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1002.251, originally #6383, eff 11-26-96); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.18)

Env-Ws 1002.32 "Grease trap" means a tank(s) where grease floats to the water's surface and is retained while the clearer water below is discharged.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97 (formerly Env-Ws 1002.256, originally #6383, eff 11-26-96); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.19)

Env-Ws 1002.33 "Grey water" means residential wastewater but not including the toilet waste. For the purposes of this definition, a urinal is a toilet.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.34 "Holding tank" means a sealed tank with no outlet to a dry well or other effluent disposal area and which stores septage or other wastes until the wastes can be pumped out and hauled to an

approved disposal site. A holding tank is not an individual sewage disposal system as defined in Env-Ws 1002.40.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,

INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1002.27); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.20)

Env-Ws 1002.35 "Horizon" means a soil layer which is below the topsoil.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1002.271, originally #6383, eff 11-26-96); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(7))

Env-Ws 1002.36 "Hydric soil" means a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.37 "Hydrophytic vegetation" means vegetation typically adapted for life in inundated or saturated soil conditions.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.38 "Impermeable substratum" means any subsurface material which is relatively impervious such as hard pan, clay, slate-like materials and other materials having a perc rate of greater than 60 minutes/inch.

Source. #6451, eff 2-8-97 (from Env-Ws 1002.29); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.21)

Env-Ws 1002.39 "Increase the load on a sewage disposal system", as used in RSA 485-A:38, means:

- (a) In an existing non-commercial building, adding bedrooms or converting existing rooms to bedrooms;
- (b) Converting from seasonal to full-time use or occupancy, as specified in Env-Ws 1004.15;
- (c) Converting from residential use only to residential plus commercial use or commercial use only; or

(d) Changing or adding to an existing commercial use so as to increase the flow as calculated using Env-Ws 1008.03(c), Table 1008-1.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.40 "Individual sewage disposal system" means any effluent disposal or treatment system, other than a municipally-owned and operated system, which receives either sewage or other wastes, or both, including septic tank leach field systems, privies or dry pit toilets, and incinerator-type toilets such as gas-operated, electric, fossil-fueled or any combination thereof.

Source. #6451, eff 2-8-97 (from Env-Ws 1002.30); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.22)

Env-Ws 1002.41 "Inspection" means an overview by the department of the effluent disposal system to ensure that the installed system is in compliance with the approved plans and specifications.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.42 "Installation" means to establish or construct an effluent disposal system in an indicated place.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.43 "Large disposal system" means an individual effluent disposal system which disposes of more than 2500 gallons of sewage per day.

Source. #6451, eff 2-8-97 (formerly Env-Ws 1002.325); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.23)

Env-Ws 1002.44 "Leach bed" means an effluent disposal area constructed of stone and pipe.

Source. #6451, eff 2-8-97 (from Env-Ws 1002.33); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.24)

Env-Ws 1002.45 "Ledge lot" means a lot which has less than 4 feet of suitably deposited soil above ledge.

Source. #6451, eff 2-8-97 (from Env-Ws 1002.34); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.26)

Env-Ws 1002.46 "Manufactured housing park" or "MHP" means an area with detached housing

units that are assembled on site and available for permanent residential use.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.47 "Marshes", for the purposes of these rules, means areas which are ponded or saturated for extended periods of time, do not support woody vegetation, are dominated by soft-stemmed herbaceous plants such as grasses, reeds, and sedges, and which exhibit very poorly drained soil conditions as determined by Env-Ws 1014.02 and Env-Ws 1014.03(a).

Source. #6451, eff 2-8-97 (from Env-Ws 1002.35); ss by #7079, eff 8-26-99 (formerly Env-Ws 1002.27)

Env-Ws 1002.48 "Matrix" means the natural soil material composed of both mineral and organic matter.

Source. #6451, eff 2-8-97 (from Env-Ws 1002.36); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(8))

Env-Ws 1002.49 "Mineral soil surface" means the top of the uppermost soil horizon consisting of mineral material with less than 12 to 18 percent of organic carbon, depending on the clay content.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.50 "Mottles" means the spots of contrasting colors in a horizon, with both high chroma and low chroma represented in the variegated colors.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(11))

Env-Ws 1002.51 "Natural woodland buffer" means "natural woodland buffer" as defined by RSA 483-B:4, XI.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.28)

Env-Ws 1002.52 "Operational approval" means written approval to cover and use or operate the constructed sewage disposal system, which is issued only after inspection by an authorized agent of the department under RSA 485-A:29, I.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.29)

Env-Ws 1002.53 "Organic soil material" means from 12 to 18 percent or more organic carbon by dry weight, depending upon the percent of clay content.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1002.54 "Percolation test" means a test hole in which is measured the rate of absorption of water into the soil under partially controlled conditions, used to estimate suitability of the soil for receiving sewage effluent. The rate of absorption is expressed in number of minutes required for water to drop one inch.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.30)

Env-Ws 1002.55 "Poorly drained soils" means hydric soils that have aquic conditions in the upper part, in accordance with Env-Ws 1014.02(a), and one or more of the following:

- (a) Within 10 inches and directly under an A or Ap horizon, is a depleted or gleyed matrix;
- (b) Within 20 inches and directly underlying a thick or very thick, chroma 2 or less, value 3 or less, A or Ap horizon, a depleted or gleyed matrix which is 4 inches or more in thickness;
- (c) Have a spodic horizon and within 6 inches of the top of the mineral soil material have an E horizon with 5% or more redoximorphic features and directly underlain by a spodic horizon with either of the following:
  - (1) A Bs horizon with redoximorphic features in the upper part; or
  - (2) A chroma 3 or less, value 3 or less, Bh or Bhs horizon, that is directly underlain by redoximorphic features;
- (d) Within 10 inches of the top of the mineral soil material and directly underlying a chroma 2 or less, value 3 or less, A horizon or shallow E horizon, a chroma and value of 3 or less Bh or Bhs horizon, greater than 2 inches, directly underlain with 5% or more redoximorphic features;
- (e) Within 10 inches of the mineral soil material and directly underlying a chroma 2 or less, value 3 or less Ap horizon is one of the following:
  - (1) An E horizon with 5% or more redoximorphic features directly underlain by a horizon with redoximorphic features;
  - (2) A chroma and value of 3 or less Bh or Bhs horizon directly underlain by 5% or more redoximorphic features; or
  - (3) A Bs horizon with 5% or more redoximorphic features;
- (f) Do not have a spodic horizon, the dominant texture in the upper 20 inches is loamy fine sand or coarser and either of the following:
  - (1) Within 10 inches of the mineral soil material and directly underlying a chroma 2 or less, value 3 or less A or Ap, a horizon with matrix color chroma 3 or less, value 4 or more with 5% or more redoximorphic features; or
  - (2) Within 15 inches of the top of the mineral soil material and directly underlying a

greater than 10 inches, less than 15 inches, chroma 2 or less, value less than 3 Ap, a horizon with matrix color chroma 3 or less, value 4 or more with 5 % redoximorphic features;

(g) Do not have a spodic horizon, such that the dominant texture in the upper 20 inches is finer than loamy fine sand and within 10 inches of the top of the mineral soil material and directly underlying a chroma 2 or less, value 3 or less A or Ap, a horizon with 10% or more redox depletions and within 20 inches, a horizon with a depleted or gleyed matrix;

(h) Do not have a spodic horizon, such that the dominant texture in the upper 20 inches is finer than loamy fine sand and within 15 inches of the mineral soil material and directly underlying a greater than 10 inch, less than 15 inch, chroma 2 or less, value less than 3 Ap, is either of the following:

(1) A horizon with 20% or more redox depletions and within 20 inches a horizon with a depleted or gleyed matrix; or

(2) A horizon with 10% or more redox depletions and within 20 inches a horizon with a depleted or gleyed matrix and within 6 inches of the top of the mineral soil material there is 5% or more redoximorphic features;

(i) Any soil with a chroma 2 or less, value less than 3 A or Ap less than 10 inches thick and directly underlain by horizon with color matrix chroma 3 or less with 10% or more redoximorphic features and within 24 inches of soil surface redox depletions and either of the following:

(1) Within 6 inches at the top of the mineral soil surface has 5% or more redoximorphic features; or

(2) Within 6 inches of the top of the mineral soil surface has 2% or more iron/manganese nodules and/or concentrations features.

Source. #7079, eff 8-26-99

Env-Ws 1002.56 "Primary building line" means "primary building line" as defined in RSA 483-B:9, II(b).

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.31)

Env-Ws 1002.57 "Prominent redoximorphic features" means the contrast in color between a redoximorphic feature and the matrix.

Source. #7079, eff 8-26-99

Env-Ws 1002.58 "Protected shoreland" means "protected shoreland" as defined by RSA 483-B:4, XV.

Source. #7079, eff 8-26-99 (formerly Env-Ws

1002.32)

Env-Ws 1002.59 "Public sewer" means any publicly-owned pipe or conduit designed to receive and convey sewage or other wastes to a municipally-owned and operated treatment works.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.33)

Env-Ws 1002.60 "Receiving layer" means the natural soil under and around an effluent disposal area, beyond the biomat interface, which receives, filters, and provides final disposal of the effluent.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.34)

Env-Ws 1002.61 "Recreational campground" means "recreational campground" as defined in RSA 216-I:1, VII, namely "a parcel of land on which 5 or more campsites are occupied or are intended for temporary occupancy for recreational dwelling purposes only, and not for permanent year-round residency, excluding recreation camps as defined in RSA 485-A:23."

Source. #7079, eff 8-26-99

Env-Ws 1002.62 "Redox depletions" means bodies of chroma 2 or less, having value 4 or more where iron-manganese oxides and clay have been stripped.

Source. #7079, eff 8-26-99

Env-Ws 1002.63 "Redoximorphic features" means features formed by the processes of reduction, translocation, and/or oxidation of iron and manganese oxides.

Source. #7079, eff 8-26-99

Env-Ws 1002.64 "Reference line" means "reference line" as defined by RSA 483-B:4, XVII, namely:

"(a) For natural fresh water bodies without artificial impoundments, the natural mean high water level as determined by the department of environmental services.

(b) For artificially impounded fresh water bodies with established flowage rights, the limit of the flowage rights, and for water bodies without established flowage rights, the waterline at full pond as determined by the elevation of the spillway crest.

(c) For coastal waters, the highest observable tide line, which means a line defining the furthest landward limit of tidal flow, not including storm events, which can be recognized by indicators such as the presence of a strand line of flotsam and debris, the landward margin of salt tolerant vegetation, or a physical barrier that blocks further flow of the tide.

(d) For rivers, the ordinary high water mark."

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.35)

Env-Ws 1002.65 "Repair" means to restore an effluent disposal system by reconstructing it to a sound condition.

Source. #7079, eff 8-26-99

Env-Ws 1002.66 "Replacement" means the substitution of a properly working component for a component that is no longer in proper working condition.

Source. #7079, eff 8-26-99

Env-Ws 1002.67 "Restrictive layer" means a soil horizon that restricts the downward flow of water and is uncharacteristic of the soil layers above and below, such as a layer of soil with a consistence of firm or very firm, cemented horizons, or stratified layers of silt, loam or clay within the soil profile.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.36)

Env-Ws 1002.68 "Seasonal high water table" means the depth from the mineral soil surface to the upper most soil horizon that contains 5% or more distinct or prominent redoximorphic features that increase in percentage with increasing depth.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.37)

Env-Ws 1002.69 "Septic tank" means a settling unit designed to remove substantially all settleable solids.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.38)

Env-Ws 1002.70 "Shoreland frontage" means the average of the distances of the actual natural shoreline footage and a straight line drawn between property lines.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.39)

Env-Ws 1002.71 "Site evaluation" means evaluating soil and site conditions for the purpose of locating suitable sewage disposal areas as well as building and well locations for septic system design and subdivision applications pursuant to RSA 485-A, including but not limited to:

- (a) The determination of wetland boundaries;
- (b) The determination of surface waters;
- (c) Test pit evaluation; and
- (d) Soils analysis for the purpose of wastewater treatment system design.

Source. #7079, eff 8-26-99

Env-Ws 1002.72 "Slope" means the difference in elevation in feet for 100 feet of horizontal distance.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.40)

Env-Ws 1002.73 "Small disposal system" means an individual sewage disposal system which disposes up to and including 2500 gallons of sewage per day.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.41)

Env-Ws 1002.74 "Soil horizon" means a distinct layer of soil running parallel to the soil surface, designated as the O, A, B or C horizon proceeding vertically through the soil profile from the soil surface downward.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.42)

Env-Ws 1002.75 "Special flood hazard area" means "special flood hazard area" as defined in 44 CFR 59.1.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.43)

Env-Ws 1002.76 "Spodic horizon" means a subsurface layer of soil characterized by the accumulation of aluminum oxides, with or without iron oxides and organic matter.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(15))

Env-Ws 1002.77 "Standard dimension ratio" or "SDR" means the ratio of pipe diameter to pipe wall thickness.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.44)

Env-Ws 1002.78 "Steady state" means a condition that changes only negligibly over time.

Source. #7079, eff 8-26-99

Env-Ws 1002.79 "Subdivision approval" means written approval of subdivision plans and specifications under RSA 485-A:31.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.45)

Env-Ws 1002.80 "Surface waters of the state" means "surface waters of the state" as defined by RSA 485-A:2, XIV, namely, "streams, lakes, ponds and tidal waters within the jurisdiction of the

state, including all streams, lakes or ponds bordering on the state, marshes, water courses and other bodies of water, natural or artificial."

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.46)

Env-Ws 1002.81 "Test pit" means a hole dug to determine soil characteristics and profile description, in accordance with Env-Ws 1006.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.47)

Env-Ws 1002.82 "Trench" means an effluent disposal system in which the leach lines are separated by a specific amount of soil.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.48)

Env-Ws 1002.83 "Value" means the relative lightness or intensity of color and is approximately a function of the square root of the total amount of light. Value is one of the 3 variables of color.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1014.02(a)(19))

Env-Ws 1002.84 "Very poorly drained soils" means hydric soils that are flooded daily by tides or soils that have aquic conditions in the upper part, in accordance with Env-Ws 1014.02(b), and one or more of the following:

- (a) Have an organic surface layer greater than 16 inches thick;
- (b) Have an organic surface layer of 8 to 16 inches thick and is directly underlain by a depleted or gleyed matrix;
- (c) Have an organic surface layer of 4 to 8 inches thick, or mucky A or Ap horizon and is directly underlain by a depleted or gleyed matrix; or
- (d) Do not have a spodic horizon, the dominant texture in the upper 20 inches is loamy fine sand or coarser and have an organic surface layer of 4 to 8 inches thick, or mucky A or Ap horizon, directly underlain with 5% or more redoximorphic features.

Source. #7079, eff 8-26-99

Env-Ws 1002.85 "Watercourse" as used in RSA 485-A:2, XIV, means a channel providing for the conveyance of water, whether natural or artificial, which is scoured, indicating periods of concentrated flow, and does not include drainage swales and areas of poorly drained soils as defined in Env-Ws 1002.55 in which no scour channel exists.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1002.49)

Env-Ws 1002.86 "Wetland" means an area that is inundated or saturated by surface or

groundwater at a frequency and duration sufficient to support and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas.

Source. #7079, eff 8-26-99

## PART Env-Ws 1003 PLANS AND SPECIFICATIONS

### Env-Ws 1003.01 Preparation.

(a) Plans for small disposal systems shall be prepared by a permitted designer except in the instance of a single family residence in which case the owner may prepare the design for his or her own domicile.

(b) In all cases, except when a small residential system is designed by the owner, the submitted plans shall have a seal affixed by a designer permitted in accordance with RSA 485-A:35, I.

(c) The seal affixed to all submitted plans shall be as follows:

(1) The seal shall be circular in design with corner borders;

(2) The seal shall be 1.9 inches in height;

(3) The circular portion shall include the wording "New Hampshire" at the top and "Department of Environmental Services" at the bottom; and

(4) Within the circular area, the words "Designer of Subsurface Disposal Systems" and the name and permit number of the permitted designer shall be contained.

(d) Plans for disposal systems greater than 2500 GPD shall be designed by and bear the stamps of a permitted designer who is also a civil or sanitary engineer licensed in the state of New Hampshire.

(e) Plans for systems greater than 600 GPD on ledge lots shall be designed by and bear the stamps of a permitted designer who is also a civil or sanitary engineer registered in the state of New Hampshire.

(f) Plans which involve the practice of land surveying as defined by RSA 310-A:54, IV shall bear the stamp of a licensed land surveyor as required by RSA 310-A:53, II and RSA 310-A:67, II.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1003.02 Submission and Retention of Plans.

(a) Plans and specifications shall be submitted in duplicate to the department's division of water, subsurface systems bureau.

(b) Submissions of plans and specifications for either approval for subdivision or approval for construction of subsurface sewage and waste disposal systems which have not received department approval and any approval for construction for which an approval for operation was not issued on or after a 4-year calendar period from the date of last written correspondence, shall be discarded by the department. The department shall send written notice of its intent to discard via first class mail to the most recent correspondent, with a copy to the appropriate local governing body, no less than 30 calendar days prior to discarding the application. The notice shall also state that if the applicant submits whatever information was

required by the department in the most recent correspondence within 30 days of receipt of the notice, the application shall not be discarded and shall be acted upon by the department.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1003.03 Format. The final plans for any subdivision of land and for any individual sewage disposal system(s) submitted for approval as required by RSA 485-A:29, I shall meet the following format requirements:

(a) Left margins shall be 2 inches for binding, and the remaining borders shall be at least one inch.

(b) Plans shall have the following scale:

(1) For subdivision plans, the scale shall be not more than 50 feet to one inch, unless the plan will not fit on a 28 inch by 40 inch sheet of paper, in which case a scale of one inch to 100 feet or one inch to 200 feet shall be used; and

(2) For individual plans, the lot and system shall be shown on a scale of not more than 20 feet to one inch, but if the lot cannot be shown on a 1:20 scale, it shall be shown on a larger scale.

(c) Sheet sizes shall be 22 inches x 34 inches or 28 inches x 40 inches, with separate sheets numbered and showing relationship to each other.

(d) All plans shall be folded to 8 1/2 inches by 11 inches.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1003.04 Information Required for Subdivision Approval. Each applicant for subdivision approval under RSA 485-A:29, I shall submit the following:

- (a) The name, address, business, and complete telephone number of applicant and, if applicant is not the owner, whom s/he represents;
- (b) The name, address and complete telephone number of owner of subdivision;
- (c) Identification of property location by tax map and lot number;
- (d) A statement regarding the intended use of the property;
- (e) A description of the property showing:
  - (1) All property owned by the subdivider for which approval is being requested;
  - (2) All property which is contiguous to that portion for which approval is being requested;
  - (3) All easements granted across the lot for which application is made;
  - (4) All ledge outcrops within 75 feet of the proposed EDA;
  - (5) The location of numbered test pits and percolation tests;
  - (6) The names of abutters;
  - (7) Subdivision boundaries transferred to United States Department of Agriculture, Natural Resources Conservation Service soil maps required by RSA 485-A:34, I, corroborated by actual test pit data and hydric soil data including hydric soil criterion and location of hydric soils;
  - (8) The location of existing and proposed culverts and dredge and fill areas;
  - (9) The area of each lot and the specific number for each lot;
  - (10) Right-of-way access to each lot;
  - (11) All areas unsuitable for conventional subsurface disposal;
  - (12) A delineation of the site(s) dedicated to sewage disposal for each lot;
  - (13) The location of any part of the land that lies within a special flood hazard area; and

- (14) The location of any part of the land subject to deeded rights of flowage;
- (f) The location of the subject property on United States Geological Survey quadrangle map or other suitable location plan in sufficient detail so that an inspector is able to locate the site;
- (g) The location of all surface waters and wetlands on property being subdivided, and also those within 75 feet of the subdivision;
- (h) The proposed type of water supply to be used in the subdivision;
- (i) Ground surface elevations throughout the subdivision in sufficient number to indicate the topography. If contour lines are used, lines shall be drawn with maximum intervals of 5 feet. The elevations shall be referenced to mean sea level (M.S.L.) or to the mean high water level of the nearest surface water or to other local bench mark;
- (j) The location of water pipes and existing buildings on the property and immediate vicinity;
- (k) The location of existing subsurface or other individual sewage disposal systems;
- (l) Percolation test results at proposed absorption site and date and depth measured for every lot;
- (m) For each test pit, the following information:
  - (1) The depth from ground surface to seasonal high water table; and
  - (2) The depth from ground surface to impermeable substratum and a description of each soil horizon in accordance with Env-Ws 1006;
- (n) Data for all test pits dug shall be shown on the plans and/or on attached 8 1/2" by 11" sheets, bearing the permitted designer's stamp on each sheet;
- (o) If applicable to the proposed subdivision, copies of the approval(s) for the following:
  - (1) Site specific approval for significant alteration of terrain under RSA 485-A:17;
  - (2) Groundwater permit under Env-Ws 1500;
  - (3) Dredge and fill permit under RSA 482-A; and
- (4) Water supply approval(s) under RSA 485:8;
- (p) A signed statement certifying that the plan conforms to all local applicable zoning ordinances and regulations;
- (q) If the lot is within the protected shoreland, the following additional information:
  - (1) Length of shoreland frontage, if the development is residential;
  - (2) Lot width, if the development is commercial; and
  - (3) The topography of an area equal to or greater than the lot size determined by Env-Ws 1005.03 for each lot.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5948, eff 1-6-95; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97; amd by #6383, eff 11-26-96; amd by #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; amd by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1003.05 Information Required for Subdivision Approval when Community or Public Water Supply System is Employed.

- (a) If a community water system is employed, plans and specifications of the water supply system shall be submitted to and approved by the department.
- (b) If a public water supply system is employed, a statement from the municipality that it can and will supply water shall be submitted with the application.
- (c) Plans of water main extensions shall be submitted to and approved by the department in accordance with Chapter Env-Ws 300.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; amd by #5948, eff 1-6-95; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97; amd by #6383, eff 11-26-96; ss by #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1003.06 Information Required for Individual Waste Disposal Systems. Each applicant for individual waste disposal system approval under RSA 485-A:29, I shall submit the following:

- (a) The name, address, business, and complete telephone number of applicant and, if applicant is not the owner, whom applicant represents;
- (b) The name, address, and complete telephone number of owner of lot;
- (c) Tax map and lot numbers of property on which construction, alteration, or extension of sewage or waste disposal system is proposed or anticipated;
- (d) Subdivision approval number or, if the lot is not part of a state approved subdivision, a "Subdivision Clarification Form" as per Env-Ws 1003.20 or equal. If the lot is exempt from state subdivision approval because all lots are larger than 5 acres and no lots are in protected shoreland, this shall be clearly stated on the application;
- (e) All lot dimensions and location of existing and proposed buildings, wells, and the distance to waste disposal systems;
- (f) A description of the adjoining lot if the proposed system or well is closer than 75 feet to a boundary;

- (g) The location of the subject property on United States Geological Survey quadrangle map or other similar location plan, in sufficient detail so that an inspector is able to locate the site;
- (h) The distance and location of the nearest surface water and wetlands in relation to the proposed effluent disposal system or, if the nearest surface water is greater than 75 feet away a statement to that effect;
- (i) The source of drinking water and location of proposed and existing drinking water supply pipes;
- (j) Soil data including percolation test data, test pit log, hydric soil data including hydric soil criterion and location of hydric soils and corroborated USDA Natural Resource Conservation Service soil survey data;
- (k) The number of bedrooms or estimated sewage load in gallons per day;
- (l) Ground surface elevations for the lot showing the slope of the land at 2 foot contour intervals, to at least 75 feet from building and system. Spot elevations to verify level lots shall be shown. Original and proposed contours shall be shown. Contours shall be referenced to a bench-mark located near the proposed system. This topographical information shall appear on the 1:20 scale plan;
- (m) Volume in gallons of septic tank, material of construction, such as metal, concrete, fiber glass, plastic, or other, placement of baffles, and provisions for cleaning out septic tank;
- (n) The scale plan of the effluent disposal system with construction details and dimensions on the 1:20 scale drawings;
- (o) Proof of executed easements if any part of the effluent disposal system is located on property other than the owner's;
- (p) Benchmarks and tie points to landmarks or established reference points within 100 feet;
- (q) Sill elevations, invert elevations at building exit, invert elevations at the inlet and outlet from septic tank, invert elevations at the inlet and outlet from distribution box, invert elevations of leach lines and bottom elevation of effluent disposal area. Invert elevations shall be referenced to benchmark;
- (r) The make, type, and capacity and model of sewage pump, pump well, discharge line, make, type and model of pump controls, elevations of control switches, pump well manufacturer, type and size, pressure line data and siphons, and siphon chambers, when used;
- (s) Number of outlets and name of manufacturer of distribution box;
- (t) A cross-section of the proposed effluent disposal system showing the design;
- (u) The type and size of stone where applicable;
- (v) The type and size of effluent disposal pipe, when used;
- (w) The type of effluent disposal pipe joints for perforated pipes;

(x) A statement that the effluent disposal pipes and bottom of effluent disposal system is level, in accordance with Env-Ws 1017.03;

(y) A designation on the plan of a suitable area for a replacement system, or a statement that the system shall be repaired in place;

(z) A designation on the plan of all areas of exposed ledge or boulders greater than 6 feet in diameter within 75 feet of the proposed system;

(aa) A statement signed by the applicant certifying the plan conforms to:

(1) The requirements of 44 CFR 60.3(a)(6)(ii), if within a special flood hazard area; and

(2) All applicable local septic system ordinances and regulations;

(ab) The book and page number, from the county registry of deeds, for the lot upon which the system will be constructed, or probate docket number if applicable;

(ac) The location of any part of the land that lies within a special flood hazard area;

(ad) The location of any part of the land subject to deeded rights of flowage;

(ae) If the lot is within the protected shoreland the following additional information:

(1) The reference line;

(2) The primary building line;

(3) Distance and location of nearest surface waters in relation to disposal system unless the nearest surface waters is greater than 125 feet away;

(4) A designation on the plan of the limits of the natural woodland buffer; and

(af) The design intent shall be stated clearly on the plan as follows:

(1) "The bottom of the effluent disposal system (EDS) shall be constructed at elevation"; and

(2) "There is/are approximately foot/feet above, at, or below original ground on the high contour of the designed effluent disposal system (EDS)".

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; amd and moved by #6451, eff 2-8-97 (from Env-Ws 1003.05); ss by #7079, eff 8-26-99

Env-Ws 1003.07 Applicant's Signature Required. The applicant shall agree to and sign the following statement on the "Application for Individual Sewage Disposal System" prior to

construction approval:

"The undersigned certifies that s/he is a permitted designer in good standing or the owner of said property, and that the information submitted accurately represents the existing site conditions as of the date of application."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.06); ss by #7079, eff 8-26-99

Env-Ws 1003.08 Owner's Signature Required. The owner shall agree to and sign the following statement on the "Application for Individual Sewage Disposal System" prior to construction approval:

"The undersigned certify that they are the present owners of the property referenced in this application and that they have seen the plans and they are in accordance with their needs and desires. The undersigned fully understand that should this plan be approved, no waivers to the construction approval will be allowed. Any changes will require a new submission, review and approval."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.07); ss by #7079, eff 8-26-99

Env-Ws 1003.09 Ledge Lot Specifications. In addition to the requirements for an individual waste disposal system established in Env-Ws 1003.06, the applicant designing an individual system for a ledge lot shall:

- (a) Specify the type of fill to be used to raise the bed to the appropriate height;
- (b) Specify the method of stabilization indicating compaction method, layering, wetting and stabilization period;
- (c) Supply test pit information to verify the nature of the receiving layer, both at the effluent disposal site and downslope from the proposed system as per Env-Ws 1006.04 (c);
- (d) Show all bedrock exposures within 100 feet of the proposed system; and
- (e) Show all the surface water and drinking water supplies within 200 feet of the proposed system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.08); ss by #7079, eff 8-26-99

Env-Ws 1003.10 Repair and Replacement of Existing Systems.

- (a) Systems serving non-commercial buildings may be repaired or replaced "in kind" without submission of plans, subject to the restrictions stated below. "In kind" means that the size, location, depth and type of design that existed before repair and/or replacement and that the proposed use will not change or the flow increase.
- (b) Septic tanks may be replaced with one or more tanks of the same size or larger, in the same location, without department approval.
- (c) If the effluent disposal portion of the system, including a dry well, is closer than 75 feet to surface waters or water supply wells or closer than 24 inches to seasonal high water table, plans shall be submitted by a permitted designer as per Env-Ws 1003, and approved prior to repair or replacement in accordance with Env-Ws 1003. A test pit in accordance with Env-Ws 1006 shall be dug immediately adjacent to the effluent disposal area to determine the seasonal high water table. For purposes of this section, the test pit may extend only 2 feet below the bottom of the effluent disposal portion of the disposal area.
- (d) Whenever an approval for a new design has been obtained pursuant to these rules, whether as part of an expansion or conversion of an existing use or for any other reason, the new design shall be installed if the existing system fails or is otherwise to be repaired or replaced.
- (e) Systems serving commercial buildings shall not be repaired or replaced "in-kind". If a system for a commercial building needs to be repaired or replaced, the owner of the system shall have plans submitted for approval.
- (f) Systems for facilities receiving anything other than effluent disposal shall submit plans for approval.
- (g) All repair and replacement work shall be done by a state permitted installer, except a person may do the work for the person's own private domicile.
- (h) The department shall consider and grant waivers when necessary to approve required plans for repair and replacement of systems. Waivers shall be requested in accordance with Env-Ws 1001.02.
- (i) The installer shall submit the test pit data and a sketch of the repaired/replaced system to the department.
- (j) The installer shall submit a completed questionnaire form containing the following:

- (1) The installer's opinion as to the reason for failure;
- (2) The system location;
- (3) The type of water supply;
- (4) The number of bedrooms in the residence served by the system;
- (5) The type of appliances and fixtures by which wastewater is generated, such as, dishwasher, washing machine, jacuzzi, hot tub, toilets, showers;
- (6) Information concerning the existing system's approximate age, type and kind;
- (7) A sketch showing:
  - a. Size, type, and kind of replacement system;
  - b. Location of replaced system;
  - c. Location of house, surface waters, wetlands, wells and ledge outcrops; and
- (8) Copies of previous construction approval forms attached to the completed questionnaire form.
- (k) Where plans are required by any of the above, the plans shall be submitted in accordance with Env-Ws 1003.
- (l) Installers shall obtain required local authorization and permits before repairing or replacing a system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.09); ss by #7079, eff 8-26-99

Env-Ws 1003.11 Requirements for Replacing or Remodeling Commercial Buildings. Any owner of a commercial building which has not received prior construction approval for the subsurface waste disposal system serving the building shall submit system plans and specifications for any replacement, remodeling or other renovation of the building. These plans and specifications shall be submitted to the department before starting construction on the building.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,

EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.10); ss by #7079, eff 8-26-99

Env-Ws 1003.12 Alteration of Plans After Approval.

- (a) The plan approved by the department shall be the final plan.
- (b) For an individual sewage disposal system, if the location of the bed has been moved horizontally or vertically from the location shown on the approved plan, a new application shall be submitted.
- (c) For an individual sewage disposal system, where the location of the bed has not changed but any other component of the system has been moved, a new application shall be filed if amended plans, approved and stamped by a permitted designer, are not available prior to final inspection.
- (d) For an individual sewage disposal system, where the location of the bed has not changed but any other component of the system has been moved and amended plans are available prior to final inspection, a new application shall not be required provided the amended plans are stamped by the permitted designer who prepared the approved plan.
- (e) For a subdivision, if any lot line changes, a new application shall be submitted, except as exempted by RSA 485-A:33.
- (f) If changes have been made requiring the elimination of a pump, amended plans submitted prior to or at the time of inspection shall be accepted if all other components of the effluent disposal system are installed in accordance with the approved plan. If changes have been made requiring the addition of a pump a new application shall be submitted for approval.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.11); ss by #7079, eff 8-26-99

Env-Ws 1003.13 Notification to Abutters. Prior to submitting an application for approval of a sewage or waste disposal system which contains a request for an encroachment waiver, the applicant shall comply with the notice requirements of RSA 485-A:30-a.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-

97 (from Env-Ws 1003.12); ss by #7079, eff 8-26-99

Env-Ws 1003.14 Plan Requirements Where Encroachment Waiver(s) Requested. If an applicant requests an encroachment waiver for a design requirement, it shall be clearly identified on the plans at the location where the waiver would apply.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.13); ss by #7079, eff 8-26-99

Env-Ws 1003.15 Encroachment Waiver Applications. Upon receipt of an application containing one or more requests for encroachment waivers which does not contain the information required by RSA 485-A:30-a, the department shall log in the application, and shall notify the applicant that the application shall not be reviewed until the required information is submitted. The statutory time period specified in RSA 485-A:31 shall not begin to run until all of the required information is received by the department.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.14); ss by #7079, eff 8-26-99

Env-Ws 1003.16 Encroachment Waiver Criteria.

(a) The department shall not grant a request for an encroachment waiver if the owner of the property on which the waiver would encroach objects to the waiver, unless denial of the waiver would result in the following:

(1) Where no structure had previously been constructed on the property, the owner of the property for which the waiver is sought would be entirely precluded from developing the property as a result of the denial;

(2) Where a structure on the property has had a pre-existing use, the owner of the property for which the waiver is sought would be precluded from continuing the pre-existing use except by installing a holding tank; or

(3) Regardless of any pre-existing use of the property, denial of the waiver would result in unnecessary hardship to the owner due to special characteristics of the property.

(b) In determining whether an unnecessary hardship would result pursuant to (a)(3) above, the

department shall apply those considerations applicable to decisions of a zoning board of adjustment under RSA 674:33.

(c) The department shall not automatically grant a request for an encroachment waiver if the owner of the property affected by the encroachment agrees to the encroachment, but shall proceed to review the waiver request in accordance with the criteria of Env-Ws 1001.02.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.15); ss by #7079, eff 8-26-99

Env-Ws 1003.17 Encroachment Waiver Approvals. Upon finding that an application containing a request for one or more encroachment waivers meets the requirements of these rules for approval, the

department shall notify the applicant that the department shall issue the construction approval upon receipt by the department of a copy of the recorded notice as required by RSA 485-A:30-a.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.16); ss by #7079, eff 8-26-99

Env-Ws 1003.18 Designation of Well Location.

(a) Pursuant to RSA 485-A:30-b, all plans and specifications for sewage or waste disposal systems shall show one of the following:

- (1) The actual or proposed location of the well and the protective radius associated with the well; or
- (2) A designated area for the well, within which the well can be installed anywhere without the protective well radius extending beyond the property line and without violating any other set-back requirements.

(b) In the event the well cannot be installed in the designated location or area in accordance with Env-Ws 1008.09(c), then the procedures and requirements of RSA 485-A:30-b, I(g) shall be followed, and the standard release form as per Env-Ws 1008.11 shall be executed.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,

INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.17); ss by #7079, eff 8-26-99

Env-Ws 1003.19 Replacement of Failed Systems. All applications submitted for the purpose of correcting a failed system shall be accompanied by a written statement from the town health officer confirming that the existing system is in fact in failure. Construction approvals granted for replacement of a failed system shall be valid for a period of 90 days. Failure to complete construction within the 90 day approval period shall result in the invalidation of the approval.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1003.18); ss by #7079, eff 8-26-99

Env-Ws 1003.20 Requirements of Subdivision Clarification Form.

- (a) The history of the lot shall be determined through the use of the subdivision clarification form.
- (b) The applicant shall fill out the subdivision clarification form with the following information:
  - (1) When the lot was purchased by the present owner;
  - (2) Name and address of the person from whom the property was purchased;
  - (3) A list of any abutting land owned by the seller of the property, at the time of the sale;
  - (4) A list of any abutting property for which subdivision or individual plans were submitted;
  - (5) A list of any abutting property owned by the seller since 1967; and
  - (6) The distance to nearest surface water from the lot.
- (c) The form shall be signed by the current owner of the property.

Source. #6451, eff 2-8-97 (from Env-Ws 1003.19); ss by #7079, eff 8-26-99

## PART Env-Ws 1004 APPROVALS

Env-Ws 1004.01 Water Line Connection. Where a municipal or other public water supply is used, written verification from the owner of the water system that connection will be allowed

shall be submitted by the applicant before a construction approval for an individual sewage disposal system shall be issued.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1004.02 Posting of Construction Approval. The construction approval shall be posted in a conspicuous place during the time of construction.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1004.03 Subdivision Contracts Allowed Before Approval.

(a) A subdivider shall not be required to obtain approval of the subdivision plans prior to executing contracts for sale or other conveyance of lots in the subdivision where such contracts are expressly made conditional upon the subdivider obtaining approval prior to closing or other passage of title or other interest upon payment of the agreed-to-price.

(b) Purchase and sale or other contracts containing the following language, or language of equal import, shall be acceptable under this rule:

"This contract is expressly conditioned upon (subdivider) obtaining approval of the subdivision from the New Hampshire Department of Environmental Services prior to the (closing/final transfer/lease) date, and (closing/final transfer/lease) shall not occur unless and until (subdivider) has provided

(purchaser/lessee/unit owner) with written approval by the Department of the subdivision or the part thereto containing (purchaser's) (lot/unit) containing the (lot/unit) as described herein."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1004.04 Subdivision Approval Required Prior to Septic System Approval. Subject to Env-Ws 1004.05, any lot of less than 5 acres in size created after the effective date of RSA 485-A, shall not be considered for individual septic system approval without meeting the state requirements of RSA 485-A:32 regarding prior subdivision approval.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1004.035); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.03(l))

Env-Ws 1004.05 Lots Not Having Subdivision Approval. Notwithstanding Env-Ws 1004.04, the department shall not require that a lot of less than 5 acres have subdivision approval prior to being eligible for individual septic system approval in the following circumstances:

- (a) The lot is within 1,000 feet of surface water and was created prior to July 1, 1967; or
- (b) The lot is not within 1,000 feet of surface water and was created prior to July 1, 1971; or
- (c) The lot is within 1,000 feet of surface water and was created between July 1, 1967 and July 1, 1975 or is not within 1,000 feet of surface water and was created between July 1, 1971 and July 1, 1975, and:
  - (1) The lot is within a subdivision that received local approval, if such approval was required by local ordinances or regulations in place at the time the lot was created; and
  - (2) 50% or more of the other lots in the subdivision have been built on pursuant to valid construction approvals issued by the department or its predecessor agency or 25% to 50% of the lots, including at least one abutting lot, have been built on pursuant to valid construction approvals; and
  - (3) Subdivision approval cannot be obtained from the department because the lot does not meet current subdivision criteria.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.04); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.04)

Env-Ws 1004.06 Inspection Before Operational Approval.

- (a) In accordance with RSA 485-A:29, I, the department shall inspect the effluent disposal system before it is covered and placed in operation.

(b) Inspection by the department shall not be construed as a substitute for good construction oversight practices which shall be conducted throughout the construction process by the permitted installer or homeowner, where the homeowner is installing the EDS at his or her own domicile.

(c) To receive a large disposal system operational approval, a design required to be completed by a licensed professional engineer/permitted septic system designer shall be inspected by him/her or an equivalently qualified engineer/designer and a written report shall be submitted to the department.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.05); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.05)

Env-Ws 1004.07 Operation Approvals. To obtain an operation approval, the disposal system and building foundation or other hookup shall be installed in accordance with the approved plan. A stake marked "well" shall be placed by the permitted installer in the proposed well location if the well has not been installed.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.06); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.06)

Env-Ws 1004.08 Field Waivers. No field waivers shall be granted to accommodate non-conformance with approved plans or inaccurate information on approved plans or for any other reason.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.07); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.07)

Env-Ws 1004.09 Transfer of Approvals. All approvals which are issued under these rules shall be transferable to any future owner.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.08); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.08)

#### Env-Ws 1004.10 Expiration of Construction Approvals.

(a) Except as provided in Env-Ws 1003.19, all construction approvals issued by the department shall expire 4 years from the date of issue, unless an operational approval has been granted for the system.

(b) If the system is actively under construction when the construction approval will expire, including construction approvals granted under Env-Ws 1003.19, the owner or applicant may request an extension of up to 90 days past the expiration date by submitting a written request to the department. Provided the request identifies the owner and applicant's names and addresses, the location of the property, the construction approval number, and the estimated time required to complete the system and that the system is actively under construction, the department shall grant the extension.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.09); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.09)

#### Env-Ws 1004.11 Transfer of Construction Approvals.

(a) Construction approvals shall be formally transferred from one owner to a new owner by the department upon request of the new owner.

(b) Any request for transfer pursuant to (a) above shall be submitted in writing.

(c) Any request for transfer pursuant to (a) above shall contain the following information:

- (1) The construction approval number;
- (2) Identification of the owner(s) listed on the construction approval;
- (3) The person(s) to whom the construction approval is being transferred;
- (4) Recording information of deed that transferred ownership of property, including name of grantor, grantee, town, county, registry and book and page numbers; and
- (5) A description of the property.

(d) Prior to transfer of the construction approval, the new owner shall:

(1) Read, view, and possess prior approvals, plans and any related conditions assigned thereto; and

(2) Agree to abide by the previously issued approvals;

(e) The system shall be constructed in strict accordance with the approved, transferred plans and no waivers to this construction approval shall be allowed.

(f) Any changes to the system design shall require a new submission, review and approval prior to any construction.

(g) Transfer of the construction approval shall be allowed upon receipt of a written request containing the information identified in (c), above, if the new owner agrees to and signs the following statement:

"The undersigned certify that they are the present owners of the property formerly of and that they have read, viewed and possess the prior approvals, plans and any related conditions assigned thereto. The undersigned agree that they will abide by the previously issued approvals. The undersigned fully understand that the system must be constructed in strict accordance with these plans and that no waivers to this construction approval will be allowed. Any changes will require a new submission, review and approval prior to any construction.

Our Title Reference is Book Page ; Registry of Deeds and briefly is for certain land known as: situated in , New Hampshire."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.09); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.10)

Env-Ws 1004.12 Approval For Water Supply. Where a community water system is to be provided, subdivision approval shall not be granted until the source, quality, quantity, storage and design of distribution system have received prior approval pursuant to Env-Ws 300.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.10); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.11)

Env-Ws 1004.13 Relation to Other State Approvals. If a sewage disposal system construction proposal requires state approvals or permits under other state statutes in order to be constructed in accordance with the

plans, but is submitted without copies of those permits or approvals, then the department shall not approve the application until the information is received.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.11); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.12)

Env-Ws 1004.14 Approval for Expansion of Existing Use, Including Conversion to Full-time Occupancy. Pursuant to RSA 485-A:38, prior to commencing any modifications, additions, or replacements of any structure, or use of any structure which would result in any increase in the load on a subsurface sewage disposal system, or prior to commencing full-time occupancy of a structure, an owner shall submit an "Application for Individual Sewage Disposal System Approval" in accordance with the provisions of Env-Ws 1004.16.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.12); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.13)

Env-Ws 1004.15 Conversion to Full-Time Use or Occupancy. An existing structure shall be considered to be used or occupied full-time, and not subject to RSA 485-A:38, if, prior to January 1, 1990, it:

- (a) Had been occupied for 9 or more months out of 12 consecutive months; or
- (b) It met all of the following criteria:
  - (1) The structure had and continues to have insulation;
  - (2) The structure had and continues to have a heating system;
  - (3) The structure was and continues to be served by a potable year-round water supply;
  - (4) The structure had and continues to have indoor plumbing and a waste water disposal system that does not discharge untreated waste water directly to surface waters; and
  - (5) The structure was and continues to be served by an AC electric power supply.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

Env-Ws 1004.16 Expansion of Existing Use, Including Conversion to Full-time Occupancy.

- (a) In order to apply for a permit for expansion of existing use, including conversion to full-time occupancy, the applicant shall submit an "Application for Individual Sewage Disposal System Approval", in accordance with Env-Ws 1000.
- (b) Prior to submitting an application, the applicant shall review any associated plans and determine that they are in accordance with the applicant's needs and desires.
- (c) No waivers to these rules shall be allowed to accommodate any expansion of the existing use or conversion to full-time occupancy.
- (d) Each applicant for expansion approval under RSA 485-A:38 shall submit the following:
  - (1) The name, address, business name, and complete telephone number of the applicant and, if the applicant is not the owner, whom the applicant represents;
  - (2) The name, address, and complete telephone number of the owner of the property on which the structure which is proposed to be expanded or occupied on a full-time basis exists;
  - (3) The lot and subdivision number and tax map and lot number of the property on which the structure which is proposed to be expanded or occupied on a full-time basis exists;
  - (4) If the structure is served by an existing state-approved subsurface sewage disposal system which meets the requirements of Env-Ws 1000, a copy of the most recent applicable state-approved plans and specifications, construction approval and operation approval for the system;
  - (5) If the structure is not served by an existing state-approved subsurface sewage disposal system, an application for approval of a design for a new system in accordance with Env-Ws 1000; and
  - (6) A statement that either the state-approved plans and specifications for the existing system or the design for a new system, as applicable, meets the minimum standards for use or occupancy of the town or city in which the lot is located.
- (e) Each application shall be signed by the applicant.
- (f) The owner shall agree to and sign the following statement on the "Application for Individual Sewage Disposal System Approval" prior to submission of the application:

"The undersigned certify that we are the present owners of the property which is the subject of this application and that we have reviewed any associated plans and that the plans are in accordance with our needs and desires. The undersigned fully understand that should this application be approved, no waivers to the rules will be allowed to accommodate the expansion of existing use, and any changes will require a new

submission, review and approval."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1004.13); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.14)

Env-Ws 1004.17 Fee. All applications for expansion of existing use or conversion to full-time occupancy shall be accompanied by the fee specified in RSA 485-A:30 for new applications.

Source. #6451, eff 2-8-97 (from Env-Ws 1004.14); ss by #7079, eff 8-26-99 (formerly Env-Ws 1004.15)

Env-Ws 1004.18 Relocation or Expansion of Existing Buildings, Replacement of Demolished or Burned Buildings. Replacement of buildings that have been demolished or burned, or reconstruction of a building in a new location or expansion of the existing structure, shall be considered new construction and shall require submission of an application, including plans and specifications, in accordance with Env-Ws 1003, unless a valid construction and operating approval exists and the total sewage load, as determined by Env-Ws 1008.03, will not be increased.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1004.16)

Env-Ws 1004.19 Revocation of Approvals.

- (a) Any approval issued by the department shall be issued based on the presumption that the information submitted as part of the application is true, complete and not misleading.
- (b) If, after the issuance of an approval, the department receives information that indicates that the information upon which the approval was based was not true and complete or was misleading, the department shall notify the permittee of the date, time and place of a hearing at which the permittee shall be given an opportunity to show cause why the approval should not be revoked, which notice and hearing shall be in accordance with RSA 541-A:31.
- (c) If as a result of the hearing the department determines that the approval would not have been issued if true and complete information had been presented at the time of the application and that the site cannot be made to conform to the requirements of the rules, the department shall revoke the approval.
- (d) If as a result of the hearing the department determines that the approval would not have been issued if the true and complete information had been presented at the time of the application but that the site can be made to conform to the requirements of the rules, the department shall

suspend the approval and shall reinstate the approval upon receiving proof from the permittee that the site meets the requirements of the rules for approval.

Source. #7079, eff 8-26-99 (formerly Env-Ws 1004.17)

## PART Env-Ws 1005 SUBDIVISIONS

Env-Ws 1005.01 Purpose. Subdivision rules are to assure to the greatest extent possible that each lot/unit in a subdivision can sustain on-site sewage disposal indefinitely so that the purpose of RSA 485-A and Env-Ws 1001.01 can be maintained.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1005.02 Calculating Lot Sizes. In calculating lot sizes for Env-Ws 1005.03 and Env-Ws 1005.04, the following shall apply:

(a) When a lot for a single-family residence has more than one soil type, the lot size shall be calculated on the basis of the site loading for each soil type. However, in all cases there shall be a minimum of 20,000 contiguous square feet of soil suitable for a receiving layer. At least 4,000 square feet of this contiguous area shall be suitable for the placement of an individual sewage disposal system.

(b) To show the suitable contiguous area, the applicant shall:

(1) Show the area on the plan with the test pit; or

(2) Submit an acceptable individual sewage disposal system design meeting all other requirements of Env-Ws 1003.

(c) When test pits indicate conditions better than those implied by the Natural Resource Conservation Service soil maps, a staff member of the department shall look at test pits to determine the soil capability. When the owner reports conditions worse than those indicated by the Natural Resource Conservation Service soil maps, then the owner's data shall be used as a basis for calculating minimum lot size.

(d) Land created by filling with soil from offsite, as classified by the Natural Resource Conservation Service, shall be assessed on its own soil characteristics.

(e) Ponds, streams, perennially wet areas and very poorly drained soils, as defined in Env-Ws 1002.84 and Env-Ws 1014.02, shall not be included in calculating minimum lot size, even though lot boundaries might include these areas.

(f) An interest in land conveyed by an easement or right-of-way such as for power lines, which

allows the grantor to dispose of sewage within the easement or right-of-way may be counted in figuring the grantor's lot size. However, the easement or right-of-way land area shall not also be counted as disposal area by the grantee.

(g) Areas of ledge outcrop shall not be counted for sewage loading.

(h) The slope of the land shall be figured in the lot size requirements. Land with a slope in excess of 35% shall not be counted and the lot shall have an area with a slope less than 25% suitable for the location of an effluent disposal area.

(i) The slope of a lot shall be determined by finding the average slope across the lot, measured perpendicular to the contours.

(j) For lots with peaks, gullies, or ridges, composite average slope shall be used.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5948, eff 1-6-95; amd by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97 (from Env-Ws 1005.07); ss by #7079, eff 8-26-99 (formerly Env-Ws 1005.06)

#### Env-Ws 1005.03 Minimum Lot Sizes - Residential, 1 to 4 Bedrooms.

(a) The minimum lot size for subdivisions for single family residences of not more than 4 bedrooms, where each lot has or is proposed to have an on-lot water supply and an on-lot sewage disposal system, shall be determined in accordance with the following:

(1) When determining minimum lot sizes, in square feet, and factors for sewage loading, soil groups and slopes shall be used as set forth in Table 1005-1 below:

Table 1005-1

#### Minimum Lot Size- Residential, 1 to 4 Bedrooms

Soil Grp:	1	2	3	4	5	6
Slope						
0-8% or	30,000	39,000	48,000	43,500	90,000	
A/B	1.0	1.3	1.6	1.45	3.0	See (a)(2)

8-15% or	33,000	43,000	53,000	48,000	Not	
C	1.1	1.43	1.76	1.6	Applicable	See (a)(2)
15-25% or	36,000	46,800	62,000	52,000	Not	
D	1.2	1.56	2.08	1.73	Applicable	See (a)(2)
25-35% or	39,000	50,700	72,000	57,000	Not	
E	1.3	1.69	2.4	1.90	Applicable	See (a)(2)

(2) Very poorly drained soils shall not be counted toward site loading to obtain subdivision approval.

(3) For purposes of determining minimum lot sizes, soil groups shall be as follows:

- a. Group 1 soils shall be well-drained to excessively well-drained soils with rapid permeability;
- b. Group 2 soils shall be well-drained soils with moderate permeability;
- c. Group 3 soils shall be moderately well-drained and well-drained with hardpan;
- d. Group 4 soils shall be bedrock relatively close to the surface;
- e. Group 5 soils shall be poorly-drained soils; and
- f. Group 6 soils shall be very poorly drained soils. Specific names of soils in each group are listed in the appendix to this chapter.

(b) For individual lots served or proposed to be served by an on-site sewage disposal system and a municipal or approved community off-lot water supply, the lot size shall be at least 50% of the size shown in the table above or 20,000 square feet, whichever is larger.

(c) For lots having or proposed to have an on-site water supply with off-lot effluent disposal systems, the off-lot area shall meet the required lot size established in accordance with Env-Ws 1005.03. In such cases, the lot upon which the structure will be built shall be of sufficient size to accommodate the full protective well radius established by Env-Ws 1008.05.

(d) For lots which have or are proposed to have off-lot sewage disposal and off-lot municipal or approved community water supply, local lot size regulations shall apply.

(e) Where ledge is encountered at less than 4 feet, Group 4 soil lot sizes shall apply.

(f) Manufactured housing park sites with on-site sewerage shall be at least 10,000 square feet

multiplied by the factor listed in Env-Ws 1005.03(a)(1).

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; rpld by #5424, eff 6-24-92

New. #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1005.02)

#### Env-Ws 1005.04 Lot Size - Commercial and Residential.

(a) The minimum lot size for all other commercial and residential subdivisions shall be calculated by dividing the estimated daily flow (Q) of sewage in gallons by 2,000 and then multiplying by the sewage loading factor established in Env-Ws 1005.03, as indicated in the following formula:

Lot Size = (Q (gpd)/2000 (gpd/acre)) x factor

(b) For purposes of paragraph (a), Q shall be the estimated daily flow calculated in accordance with Env-Ws 1008.03(c) or 600 GPD, whichever is greater. However, for campgrounds which existed prior to January 1, 1993, Q may be calculated in accordance with Env-Ws 1008.03(b) so long as no additional lots are created.

(c) The required area shall be exclusive of the land inside the protective radius of any on-lot well.

(d) Each studio or 1-bedroom apartment shall be figured as 1.5 bedrooms for sewage loading purposes. A bedroom shall represent a sewage loading of 150 gallons per day.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; amd by #5692, eff 8-26-93; amd by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.04); ss by #7079, eff 8-26-99 (formerly Env-Ws 1005.03)

Env-Ws 1005.05 Cluster Subdivisions - Lot Density. Lot density within cluster subdivisions shall be computed by calculating a weighted average lot size for all the buildable soils on the parcel using the table of minimum lot sizes in Env-Ws 1005.06(a) and dividing the developable area by the computed weighted

average lot size. Developable area shall include soil groups 1, 2, 3, 4, and 5 with group 5 soils comprising no more than 25 percent of the total.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,

INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-  
97 (Env-Ws 1005.06); ss by #7079, eff 8-26-99

Env-Ws 1005.06 Minimum Lot Sizes - Cluster Subdivisions. The minimum lot sizes for cluster subdivisions shall be determined in accordance with the following:

(a) When determining minimum lot sizes, in square feet, and factors for sewage loading, soil groups and slopes shall be as set forth in Table 1005-2 below:

Table 1005-2 Minimum Lot Sizes - Cluster Subdivisions

Soil Grp:	1	2	3	4	5	6
Slope						
0-8% or	13,068	16,983	20,909	18,953	39,185	---
A/B	1.0	1.3	1.6	1.45	3.0	---
8-15% or	14,376	18,682	23,007	20,909	---	---
C	1.1	1.43	1.76	1.6	---	---
15-25% or	15,678	20,387	27,168	22,609	---	---
D	1.2	1.56	2.08	1.73	---	---
25-35% or	16,982	22,093	31,376	24,821	---	---
E	1.3	1.69	2.4	1.90	---	---

(b) Lots served by on-lot septic systems shall be sized to accommodate a 4-bedroom residence at a minimum. Such lots shall meet all other provisions of Env-Ws 1000 with the exception of the 20,000 contiguous square feet requirement of Env-Ws 1005.02 (a) and the lot-width requirements of Env-Ws 1005.07. Each lot shall be of sufficient size to accommodate a effluent disposal area of twice the size of the effluent disposal area required for the proposed sewage load as specified in Env-Ws 1014.08 and any fill extensions associated with the effluent disposal system;

(c) Effluent disposal areas for cluster lots serviced by off-lot community septic systems shall meet the provisions of Env-Ws 1005.04; and

(d) Lot owner responsibility for off-lot effluent disposal sites dedicated to the cluster subdivisions shall be clearly established in documents submitted to the department. Each lot shall have a right to the use of such areas specifically provided by an easement in the deed to the lot. Said rights shall be worded such that

they are inseparable from the deed without express written consent from the department and all other governmental agencies having jurisdictional control.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.06); ss by #7079, eff 8-26-99 (formerly Env-Ws 1005.05)

Env-Ws 1005.07 Lot Width. Each lot shall be of sufficient width in the areas where the septic system and the well are to be placed to accommodate all fill extensions and the on-lot protective well radius specified in Env-Ws 1021.04, and 1008.07, respectively.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.08); ss by #7079, eff 8-26-99

Env-Ws 1005.08 Easements and Flowage Easements.

(a) Permanent easements or strips of land for sewers to remote disposal sites shall be provided for maintenance and renewal operations. Lots split by roads or rights-of-way shall have a perpetual utility easement across the road or right-of-way.

(b) No sewage disposal system components shall be built within areas subject to deeded rights of flowage.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.09); ss by #7079, eff 8-26-99

Env-Ws 1005.09 Test Pits and Percolation Tests for Subdivisions. The suitability of each lot that has or will have on-site sewage disposal shall be demonstrated by test pits in accordance with Env-Ws 1006 and a percolation test at each site dedicated to sewage disposal in accordance with Env-Ws 1007.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5948, eff 1-6-95; ss by #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.10); ss by #7079, eff 8-26-99

Env-Ws 1005.10 Conversions to Condominiums.

- (a) Current subdivision rules shall govern the conversion of existing developed property to condominium ownership.
- (b) Prior to receiving subdivision approval for conversion of existing developed property into condominiums, existing subsurface sewage disposal facilities shall meet the most recent construction design rules or it shall be demonstrated by submission, in writing, of lot dimensions and loading calculations as per Env-Ws 1005.04 that the lots can support a wastewater disposal system.
- (c) Drinking water supplies from groundwater aquifers for existing developed property that is to be converted to condominiums shall be protected by restricting land use and prohibiting all activity detrimental to water quality and quantity within the minimum distances established by Env-Ws 1008.04, Table 1008-3, based upon the average daily demand on the system.
- (d) The protective well radius shall be preserved in accordance with Env-Ws 1008.06(b).
- (e) The responsibility for maintenance, operation, replacement, and protection of the water supply and sewage disposal systems shall be clearly established by the condominium agreement.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.11); ss by #7079, eff 8-26-99

Env-Ws 1005.11 Manufactured Housing Parks.

- (a) Subdivision plans for manufactured housing parks shall be submitted in accordance with Env-Ws 1003.
- (b) Lots within manufactured housing parks shall conform to the size requirements of Env-Ws

1005.03.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.12); ss by #7079, eff 8-26-99

Env-Ws 1005.12 Recreational Campgrounds.

- (a) Each site within a recreational campground at which pressurized potable water hook-ups are available, that is used by the same recreational vehicle for a period of more than 3 consecutive weeks shall be provided with an on-site sewage collection system, which shall convey the sanitary wastes to either an on-lot or off-lot septic system approved by the department in accordance with these rules.
- (b) Each site-within a recreational campground at which pressurized potable water hook-ups are available, that is used by the same recreational vehicle for a period of 3 consecutive weeks or less, shall not require an on-site sewage collection system, provided that sanitary service stations, sanitary service vehicles, and/or rest rooms are available at the campground to handle the disposal of all wastewater.
- (c) At sites where no pressurized water is provided the campground shall provide means of sanitary waste disposal such as sanitary service stations, sanitary service vehicles, and/or comfort stations.
- (d) As of September 5, 2000, recreational campgrounds in existence prior to September 5, 1990 shall comply with Env-Ws 1005.12 (a), (b), and (c).
- (e) Subdivision plans for recreation campgrounds shall be submitted in accordance with Env-Ws 1003.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1005.13); ss by #7079, eff 8-26-99

Env-Ws 1005.13 Non-Building Lots.

- (a) The purpose of this section is to accommodate the creation of lots for public purposes on which wastewater will not be generated or disposed or which do not meet the criteria established for minimum lot size under these rules. Such lots are typically created for purposes of providing public access to or public use of natural resources such as lakes, rivers, wildlife preserves, or

parks, or to provide green space or open space in accordance with RSA 674:21-a.

(b) For purposes of this section, the following definitions shall apply:

(1) "Anti-merger clause" means a clause in a legal document such as a deed which has the legal effect of precluding the ownership of a conservation restriction from merging with the fee ownership of the land underlying the restriction in such a way as to eliminate the restriction;

(2) "Building lot" means:

a. A proposed lot on which a building from which wastewater will discharge either:

1. Exists at the time of application for subdivision; or
2. Is intended to be erected at some time in the future; or

b. A proposed lot which meets the minimum lot size requirements of Env-Ws 1005.02, Env-Ws 1005.03, Env-Ws 1005.04, or Env-Ws 1005.07 through Env-Ws 1005.12, as applicable, regardless of whether a building from which wastewater discharges is intended to be erected;

(3) "Conservation restriction" means "conservation restriction" as defined by RSA 477:45, I, except that for purposes of this section:

a. The term is limited to the prohibition against:

1. Constructing a building from which wastewater will be discharged; and
2. Discharging wastewater to the land which is subject to the conservation easement; and

b. The easement is valid and enforceable until such time as the lot is served by municipal sewer, provided, however, that nothing herein shall prevent the easement from lasting in perpetuity if the grantor and grantee of the easement so desire;

(4) "Conservation restriction grantee" means an agency of federal, state, county, or local government or a private non-profit legal entity which has as one of its purposes the holding of conservation restrictions so as to preserve land in an undeveloped state; and

(5) "Non-building lot" means a proposed lot on which a building from which wastewater will discharge does not exist at the time of application for subdivision and will not be erected, and which does not meet the applicable requirements of Env-Ws 1005.02, Env-Ws 1005.03, Env-Ws 1005.04, or Env-Ws 1005.07 through Env-Ws 1005.12.

(c) Any person who wishes to create one or more non-building lots as part of a subdivision otherwise subject to these rules shall comply with the requirements of this section for such lot(s).

(d) Each proposed non-building lot shall be identified on the subdivision application and plan

with the words "NON-BUILDING LOT" in capital letters and either in boldface type or underlined, or both.

(e) Any approval of a subdivision containing one or more non-building lots shall identify the non-building lot(s) by lot number and the words "NON-BUILDING LOT" in capital letters on the subdivision approval.

(f) Notwithstanding Env-Ws 1003.04, for any proposed non-building lot(s) the applicant shall not be required to provide test pit or percolation test data for the proposed non-building lot(s).

(g) Applications for subdivisions creating one or more non-building lots which meet the requirements of paragraphs (c) through (f) shall be approved contingent upon execution of the conservation restriction deed pursuant to RSA 477:3, acceptance of the conservation restriction pursuant to RSA 477:47, and recording of said deed pursuant to RSA 477:3-a.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1005.14); ss by #7079, eff 8-26-99

## PART Env-Ws 1006 TEST PITS

### Env-Ws 1006.01 Location.

(a) For subdivisions where there is ledge within 4 feet of the surface, the test pit shall be in the location on which the bed is to be placed to prove that a suitable location exists.

(b) For individual systems, the test pit shall be dug at the proposed effluent disposal site.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1006.02 Depth. The test pit shall be of sufficient depth to inspect soil to 4 feet below the bottom of the proposed effluent disposal system location .

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by

#7079, eff 8-26-99

Env-Ws 1006.03 Size. The test pit shall be large enough to visually inspect the soil.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1006.04 Number.

(a) For each lot in a subdivision where ledge is encountered at less than 4 feet, the applicant shall dig test pits to satisfy the requirements of Env-Ws 1006.04(c). The number of test pits shall be determined by the designer, but in no event shall less than 2 test pits be dug.

(b) For individual systems the applicant shall dig at least one test pit at each proposed effluent disposal site. The applicant may dig additional test pits. Data on all test pits dug shall be submitted in writing to the department.

(c) For individual systems where ledge is encountered at less than 4 feet the applicant shall dig a test pit at opposite corners of the disposal area and 35 feet downslope of the system. If either of the downslope test pits is less than 3 feet to ledge, then probes shall be required at a 45 degree angle from the bed corners or as required to prove receiving layer requirements.

(d) All holes dug to test the soil, except for holes dug to determine a wetland boundary in accordance with Env-Ws 1014.03, shall be considered test pits.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1006.05 Soil Description. A description of the predominant soil horizons, including color notations based on the Munsell Soil Color Book, 1994 edition, soil structure, soil texture, soil consistency, redoximorphic features, and depth for each soil horizon shall be recorded for each test pit dug. The terminology used shall be in conformance with the technical standards of the USDA/NRCS National Cooperative Soil Survey, based on the Field Book for Describing and Sampling Soils: Version 1.1, National Soil Survey Center, NRCS, 1998.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,

INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1006.06 Recordation, Submission, and Verification.

- (a) All test pit data shall be logged by or under the supervision of a permitted designer, except that a property owner may log the data on the test pit(s) for purposes of an application for an individual septic system for his or her own primary domicile.
- (b) For an individual septic system application, the test pit for which data is submitted and relied upon shall have been observed by the applicant or a person under the control or supervision of the applicant.
- (c) When test pit data is submitted separately from plans and specifications, the data shall bear the stamp of a permitted septic system designer, except that data logged by a property owner for purposes of an application for an individual septic system for his or her own primary domicile shall bear the signature of the property owner.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1006.07 Refill. Each test pit shall be promptly refilled.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1006.08 Additional Test Pits Required.

- (a) The department shall require a new test pit to be dug for inspection by the department if the data submitted for a test pit as part of an application is internally inconsistent or is inconsistent with any other information received by the department.
- (b) The department shall require that additional test pit(s) be dug or test probe(s) be performed if the data submitted pursuant to Env-Ws 1006.04(a) is insufficient to demonstrate that a lot or

proposed lot satisfies the requirements of Env-Ws 1005.02.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

#### PART Env-Ws 1007 PERCOLATION TEST

Env-Ws 1007.01 Location. A percolation test shall be taken in the location of the proposed effluent disposal system. If more than one test is made, the test holes shall be spaced at least 20 feet apart.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1007.02 Depth of Percolation Test. The percolation test shall be conducted in the most restrictive permeable soil horizon above the seasonal high water table and below the A horizon.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1007.03 Distance from Test Pits. The percolation test shall be at least 5 feet from any test pit to assure that it is conducted in undisturbed soil.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1007.04 Size of Test Hole. The percolation test hole shall be dug with horizontal dimensions of from 4 to 12 inches and vertical sides to at least 14 inches into the most compact permeable soil.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1007.05 Procedures. The person conducting the percolation test shall:

- (a) Remove any smeared soil surfaces and provide a natural soil interface into which water may percolate;
- (b) Remove all loose material from the hole;
- (c) Add 2 inches of coarse sand or fine gravel to protect the bottom from scouring and sediment;
- (d) Fill the hole with clear water to a minimum depth of 12 inches over the gravel and maintain water in the hole for at least 2 hours, or until the drop in water as measured in accordance with (e), below, reaches steady state;
- (e) Determine the rate of water loss 2 hours after water is first added to the hole to insure that the soil is given ample opportunity to swell and to approach the condition it will be in during the wettest season of the year;
- (f) Add clear water to bring the depth of water in the hole to approximately 6 inches over the gravel, after the rate of water loss has stabilized;
- (g) Measure the drop in water level from a fixed reference point, at approximately 10 minute intervals for 1 hour, refilling 6 inches over the gravel as necessary;
- (h) Use the drop that occurs during the final 30-minute period to calculate the percolation rate;
- (i) Not be required to use the soaking procedure in sandy soils containing little or no fines, but the test may be made after the water from 2 fillings of the hole has completely seeped away.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1007.06 Size of Effluent Disposal System. The size of the effluent disposal system shall be based on the percolation rate taken in the most restrictive horizon above the seasonal high water table and below the A horizon. Where no A horizon exists, the percolation test shall be taken in the most restrictive layer above the seasonal high water table.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,

INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

## PART Env-Ws 1008 DESIGN REQUIREMENTS FOR ALL SYSTEMS

### Env-Ws 1008.01 Lot Loading Capacity.

- (a) The maximum allowable loading of sewage for subsurface disposal shall be 2000 gallons per acre per day with the best soil and slope conditions.
- (b) The maximum sewage loading shall be reduced or the acceptable land area increased with poorer conditions in accordance with Env-Ws 1005.03 or Env-Ws 1005.04.
- (c) Applications for replacement of failed systems or to replace buildings destroyed by fire shall be exempt from the lot size requirements of (a) and (b) above unless the sewage loading is proposed to be increased.
- (d) A lot of record which does not qualify under (c) above and which does not meet the loading criteria of paragraphs (a) or (b) of this section shall be eligible for approval of an individual sewage disposal system only if the following requirements are met:
  - (1) The building on the lot is not a commercial building as defined by Env-Ws 1002.12;
  - (2) The sewage disposal plan for the lot meets all other provisions of Env-Ws 1000;
  - (3) The application is accompanied by:
    - a. Proof that the lot was created in accordance with RSA 149-E or RSA 485-A; or
    - b. Deed(s) demonstrating that the lot was created prior to the dates specified in Env-Ws 1004.05(a), (b) or (c), as applicable;
  - (4) The plan indicates that low-flow fixtures shall be installed in the building; and
- (5) The lot is restricted to sewage flows of 300 GPD and 2 bedrooms, in accordance with Table 1008-1.
- (f) The approval shall be recorded by the property owner at the registry of deeds for the county in which the property is located.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1008.02 System Capacity.

(a) The maximum allowable design capacity for an individual septic system without a groundwater discharge permit as required under RSA 485-A:13 or RSA 485-C shall be 20,000 gallons per day.

(b) Systems with design capacity of 2500 gallons per day or more shall have at least 2 effluent disposal areas separated by at least 20 feet.

(c) The minimum size of system allowed shall be designed to accommodate a sewage flow of 300 GPD for commercial or non-commercial uses.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1008.015); ss by #7079, eff 8-26-99

Env-Ws 1008.03 Daily Flow Volume. In order to determine the appropriate size of the septic system components, such as the septic tank, pipe, and effluent disposal area, the daily flow volume of sewage in gallons shall be determined by one of the following methods:

(a) For new uses, by using metered water readings for similar uses, which shall be determined as follows:

(1) By finding the average of water meter readings and multiplying the average by a minimum peaking factor of 2 for commercial light flow or a maximum peaking factor of 3 for commercial heavy; or

(2) By measuring 6 months of consecutive daily meter readings, in which case the system shall be designed based on the highest daily flow without application of a peaking factor;

(b) For existing uses, by using the metered water readings for the use in accordance with (a)(1) or (a)(2) above; or

(c) For existing or new uses, by using the unit design flow figures as listed in Table 1008-1, below:

Table 1008-1 Unit Design Flow Figures

(in Gallons per Day Per Person unless otherwise noted)

USE

Design Flow

AIRPORTS5

		APARTMENTS - 1-Bedroom or Studio Apartment	225
		GPD/Bdrm	
		2 or more Bedrooms per Apartment	
		150 GPD/Bdrm	
BARS, LOUNGES	20 GPD/Seat		
BED & BREAKFASTS	60		
		CAMPS - Campground with Central Comfort	25 plus
	Station (Figure 3 people/site)	12 GPD dump station	
	Recreational Campgrounds with 3-way hookups	90 GPD/Site	
	Construction Camps (Semi-permanent)	50	
		Day Camps (no meals served)	15
		Day Camps, meals served	15 plus 3
		GPD/person/meal	
		Dining Facility Only	3
		GPD/person/meal	
		Juvenile Camps	25 GPD/person plus
	3 GPD/person/meal		
	CATERERS - Function Rooms	12	
	GPD/patron		
CHURCHES - Sanctuary Seating	3		
	Church Suppers	12	
COUNTRY CLUBS - PRIVATE			
Dining Room	10 GPD/seat		
Snack Bar	10 GPD/seat		
Locker & Showers	20 GPD/locker		
DENTISTS	200 GPD/Chair plus		

35 GPD/Staff Member

DOCTOR'S OFFICES 250 GPD/Doctor

DOG KENNELS 50 GPD/kennel

DWELLINGS, PER BEDROOM - (2 bedroom minimum system) 150 GPD/Bdrm

Rooming Houses - With Meals 60

Rooming Houses - Without Meals 40

FACTORIES (Exclusive of Industrial Waste)

Industry Without Cafeteria or Showers 20

Industry With Cafeteria, No Showers 25

Industry With Cafeteria and Showers 35

Warehouses  
35

FIRE STATIONS - Without full-time employees;

Without floor drains or food

preparation 5

GYMS - Participant 10

Spectator  
3

HAIRDRESSERS  
150 GPD/Chair plus

35 GPD/Operator

HOSPITALS (Per Bed Space) 200 GPD/Bed

HOTELS AND MOTELS -

If plan shows that only one

double bed can be accommodated 100 GPD/Room

All other 200 GPD/Room

INSTITUTIONS OTHER THAN  
HOSPITALS (per Bed Space)  
135 GPD/Bed

		LAUNDROMATS, COIN-OPERATED 500 GPD/Machine plus toilet waste
MANUFACTURED		
		HOUSING PARKS (per site) Figure on basis of bedrooms
MOTELS, see HOTELS		
	NURSING HOMES (Per Bed Space)	125
	OFFICE BUILDINGS -	Without Cafeteria
	15	
	With Cafeteria	20
	Unspecified Office Space	15 GPD/100 square feet
PICNIC PARKS - Toilet Waste Only		5
	With Bathhouses, Showers and Toilets	10
	RESTAURANTS - Eat in, plus toilet and kitchen waste	40 GPD/Seat
	Eat in, paper service, plus toilet and kitchen waste	20 GPD/Seat
	Kitchen waste only	3
	Bars and lounges	20 GPD/Seat
	plus	35 GPD/Employee
	Function Rooms	12
	SCHOOLS - Boarding	100
	Day, Without Gym, Cafeteria or	

	Showers	10
Day, Without Gyms or Showers,		
	with Cafeteria	15
	Day, With Gyms, Showers and Cafeteria	25
	SERVICE STATIONS	75
	GPD/Island, plus flows from Bays, if any.	
With Bays	125 GPD/Bay	
SHOPPING CENTERS, STORES		
	Dry Goods feet	5 GPD/100 square
Supermarkets w/ Meat		
	Dept. w/o Garbage Grinder	7.5 GPD/100 square feet
Supermarkets w/ Meat		
	Dept. w/ Garbage Grinder square feet	11 GPD/100
Dry Goods Stores in		
	Shopping Centers GPD	100
SKATING RINKS, see GYMS		
	SKI AREAS - Without Cafeteria	10
With Cafeteria in Warming Hut	15	
	SWIMMING POOLS (Public or Private with Guests)	1000
	GPD/800 square ft	
	TENNIS COURTS	250 GPD/Court
THEATERS	3 GPD/Auditorium Seat	

TOWN HALLS - Total Seating Capacity  
5

TOWN OFFICES - Office  
Employees 15

Transients 5

TRAVEL TRAILER PARKS, see CAMPS

WORKERS - Construction (At  
temporary camps) 50

Day, at Schools and Offices  
Without Cafeterias 15

Source. (See Revision Note at chapter heading for  
Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff  
6-24-92; amd by #6329, INTERIM, eff 9-6-96,  
EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-  
97 (from Env-Ws 1008.02); ss by #7079, eff 8-26-  
99

Env-Ws 1008.04 Minimum Distances.

(a) The minimum separation distance in feet for effluent disposal systems shall be in compliance with the restrictions set forth in (b), (c), (e) and Table 1008-2 below. The distances specified in the following table shall be the minimum distance, in feet, between the specified system components listed across the top and the items in the left-hand column:

Table 1008-2 Minimum Separation Distances in Feet for Sewage Disposal Systems

	Septic Tank	Leach Bed Trenches	Dry Well	Sewer Line
Surface Water	75	75	75	
Poorly Drained Soils		50	50	
Very Poorly Drained Soils			75	75
Open Drainage		75	75	75
Culvert, tight pipe		10	25	25

Culvert Opening	50	75	75	
Catch Basin	35	35	35	
Interceptor Drains Below Finished				
Grade of Effluent Disposal Area		50	75	75
Interceptor Drains Above Finished				
Grade of Effluent Disposal Area		10	25	25 10
Private Wells, on-site	75	75	75	
Private Wells, off site	75	75	75	
Community Wells	200	200	200	
Reservoirs	75	75	75	
Municipal Wells	400	400	400	400
Water Lines, pressure	10	25	25	10
Water Lines, suction	50	50	50	50
Property Lines	10	10	10	
Foundation, any type,				
with Foundation Drains,				
including outfall drainpipe		10	25	25
Foundation, full cellar,				
without Foundation Drains		5	10	10
Foundation, slab, without				
Foundation Drains	5	5	5	
Foundation Drain Outfall		35	35	35
Top of Natural Embankment or				
Natural Steep Slope	5	20	20	

(b) In ground swimming pools shall not be located within 35 feet downslope of an effluent disposal area and in no case closer than 10 feet.

(c) The distance between a septic tank and surface water, open drainage, or a private on-site well may be reduced to 50 feet if pipe having an SDR of 26 or equivalent is used and the tank is

sealed and grouted to prevent infiltration and exfiltration.

(d) The distance between a septic tank, leach bed, trench, or dry well and open drainage may be reduced to 35 feet where the open drainage, such as a roadside ditch, does not intercept the seasonal high groundwater.

(e) Setback distances to property lines shall be as follows:

(1) Leach beds and trenches shall be located at certain minimum distances in the downgradient direction from property lines as shown in Table 1008-3 in (6), below;

(2) Perpendicular to the gradient, the required minimum distance to a property line shall be one-half of the distance shown in Table 1008-3 in (6), below;

(3) Upgradient of the effluent disposal area, the minimum distance to a property line shall be one-quarter the distance shown in Table 1008-3 in (6), below;

(4) Groundwater easements on abutting property may be used to meet setback distance requirements;

(5) If the applicant submits a hydrogeological analysis of the site which shows that the requirements of Env-Ws 1500 will be met, the minimum setback distances shall be reduced;

(6) The discharge of domestic wastewater into subsurface disposal system(s) with aggregate design flows greater than 1,000 gallons per day (GPD) on a single lot shall meet setback distances in accordance with Table 1008-3 below:

Table 1008-3 Minimum Nitrate Setback Distance to Property Line (feet)  
for Aggregate Flows Discharged onto a Single Lot

Design Flow, GPD	Hydraulically Downgradient	Hydraulically Sidegradient	Hydraulically Upgradient
0-1,000	50	25	12
1,001-1,100	55	28	14
1,101-1,200	60	30	15
1,201-1,300	65	33	17
1,301-1,400	70	35	18
1,401-1,500	75	38	19
1,501-1,600	80	40	20
1,601-1,700	85	43	22

1,701-1,800	90	45	23
1,801-1,900	95	48	24
1,901-2,000	100	50	25
2,001-2,100	105	53	27
2,101-2,200	110	55	28
2,201-2,300	115	58	29
2,301-2,400	120	60	30
2,401-2,500	125	63	32
2,501-3,000	150	75	37
3,001-3,500	175	88	44
3,501-4,000	200	100	50
4,001-4,500	225	113	57
4,501-5,000	250	125	63
5,001-6,000	275	138	69
6,001-7,000	300	150	75
7,001-8,000	320	160	80
8,001-9,000	340	170	85
9,001-10,000	350	175	88
10,001-15,000	435	213	107
15,001-19,999	500	250	125

(7) For non-aggregate flows of up to 999 GPD, the setback distance to any property line shall be 10 feet; and

(8) If the setback distances for 2 or more effluent disposal areas overlap, the effluent disposal areas shall be considered one system and the setback distance shall be determined by the combined flow of the leach fields, in accordance with Table 1008-3;

(f) For any well for which a wellhead protection area has been established pursuant to RSA 485-

C, the distance between the well and the septic system components shall be as established in Env-Ws 378.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.03); ss by #7079, eff 8-26-99

Env-Ws 1008.05 Protective Well Radii - Distance.

(a) A protective area designated as the "protective well radius" shall be maintained around every private commercial or non-commercial drinking water well.

(b) Subject to the provisions of Env-Ws 1008.07, the protective area shall be a uniform circle having a radius determined based on the total flow as set forth in Table 1008-4, below:

Table 1008-4 Protected Well Radii for Shallow or Dug Wells or Drilled Bedrock Wells

<u>Flow (GPD)</u>	<u>Radius (ft.)</u>
0-750	75
751-1440	100
1441-4320	125
4321-14,400	150
14,401-28,800	175
28,801-57,600	200
57,601-86,400	250
86,401-115,200	300
115,201-144,000	350
greater than 144,001	400

(c) A protective well radius that is fully recognized or which is accorded full recognition by these rules means that the radius shall not be reduced or encroached upon by any septic system component on an abutting lot.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-  
97 (from Env-Ws 1008.04); ss by #7079, eff 8-26-  
99

Env-Ws 1008.06 Protective Well Radii - Uses.

(a) Unless precluded by other state or local regulation, the land surface within a protective well radius may be used for the normal residential or commercial surface activities associated with the structure served by the well, such as buildings, parking areas, recreational activities, and surface water drainage control structures.

(b) Subject to Env-Ws 1008.04, no portion of a septic tank, effluent disposal area, pump chambers or other such septic system components shall be within a protective well radius. Pipes connecting such components may be within the protective well radius provided they have an SDR of 26 or equivalent.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-  
97 (from Env-Ws 1008.05); ss by #7079, eff 8-26-  
99

Env-Ws 1008.07 Recognized Extent of Protective Well Radii.

(a) Pursuant to RSA 485-A:30-b, I(b) and (c), the protective well radius shall be contained wholly within the boundaries of any lot created after August 20, 1989, and shall be contained wholly within the boundaries of an existing lot of record to the extent possible. Any protective well radius wholly on the lot shall be accorded full recognition. Where the protective well radius extends across the property line, the portion of the protective well radius on the lot shall be accorded full recognition.

(b) Any portion of a protective well radius extending across a property line onto an easement duly granted by the owner of record of the abutting property and recorded in the registry of deeds for the county in which the property is located shall be accorded full recognition. A copy of the recorded easement shall be submitted with the application.

(c) Any portion of a protective well radius extending across a property line onto land that is precluded from development shall be accorded full recognition without a deeded right to use the abutting property, provided the use of the abutting property is clearly identified on the plan and provided that the applicant submits a copy of appropriate evidence of the non-developability of the abutting land with the application.

(d) For purposes of (c) above, appropriate evidence shall be determined with reference to the reason why the land is precluded from development as follows:

- (1) Land held under the terms of RSA 221-A where the deed precludes development of buildings or subsurface waste disposal systems within the affected area shall be evidenced by a copy of the deed submitted with the application;
- (2) Any surface water shall be evidenced by a copy of the portion of a map locating the surface water submitted with the application;
- (3) Any wetland as defined by Env-Ws 1002.86 and Env-Ws 1014.03 shall be evidenced by a certification from a permitted designer submitted with the application; or
- (4) Land within a municipal property line septic system set-back shall be evidenced by a letter from a duly-authorized municipal official stating that the property line set-back was validly adopted and is currently effective submitted with the application.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.06); ss by #7079, eff 8-26-99

Env-Ws 1008.08 Overlapping Protective Well Radii. Owners of abutting lots may agree to overlap their respective protective well radii for their mutual benefit. In order for the well radii to be accorded full recognition, any such agreement shall be evidenced by cross-easements which shall be duly executed and recorded.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.07); ss by #7079, eff 8-26-99

Env-Ws 1008.09 Non-conforming Protective Well Radii.

(a) Pursuant to RSA 485-A:30-b, I(b), in the case of a new commercial building or an existing commercial building where the sewage loading is projected to increase, if the protective well radius cannot be maintained entirely on-lot, on a deeded easement, or on land otherwise precluded from development as set forth in Env-Ws 1008.07(c), then the application shall be denied. For purposes of this section, a private residence also being used for commercial purposes where the total flow exceeds 600 gallons per day ("GPD") shall be deemed to be a commercial building.

(b) Pursuant to RSA 485-a:30-b, I(c), if the protective well radius for a non-commercial building cannot be wholly maintained on an existing lot of record or onto a deeded easement or land

otherwise precluded from development as set forth in Env-Ws 1008.07(c), due to the size or other physical characteristics of the lot, the recognized protective well radius shall extend no further than the property line. For purposes of this provision, a non-commercial building includes a private residence also being used for commercial purposes where the total flow is equal to or less than 600 GPD. When the protective well radius will not be wholly maintained on the lot pursuant to this section, the owner of the property shall execute and record the standard release form pursuant to Env-Ws 1008.11 acknowledging that the actual well radius does not conform to the requirements of Env-Ws 1005.10 or Env-Ws 1008.05.

(c) When the well cannot be installed as shown on the plan due to obstacles of a permanent nature, and the well radius cannot be maintained on-lot or on an area designated in Env-Ws 1008.07 as a result of the alternative placement, the property owner shall, as required by RSA 485-A:30-b, I(g), submit to the department a copy of the amended plan and the standard release form pursuant to Env-Ws 1008.11. The standard release form shall provide written acknowledgment that the consequences of the alternate well location are fully understood by the owner or the owner's agent prior to well installation. Buildings constructed prior to the installation of the well or naturally-occurring geological or topographical features such as ledge outcrops or ravines, which prevent the well construction apparatus from being brought to the designated location shall be considered obstacles of a permanent nature.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.08); ss by #7079, eff 8-26-99

Env-Ws 1008.10 Recordation of Descriptive Location of Well. Any time the recognized protective well radius is less than the radius specified in Env-Ws 1008.05, the applicant shall record a narrative description of the actual location of the well which shall include distances and directions from at least 2 permanent features of the lot, such as an iron pin marking a corner boundary or structure foundation. The description so prepared shall comply with the requirements of RSA 478:4-a.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.09); ss by #7079, eff 8-26-99

Env-Ws 1008.11 Standard Release Form for Protective Well Radii.

(a) The applicant shall fill out the standard release form with the following:

- (1) Whether the release is being executed because the well has been moved from the location shown on the approved plan or because the well does not fit on an existing lot of record;
  - (2) The name and latest mailing address of the owner of the lot;
  - (3) The location of the property, including street address, town, county, tax map and lot number, and current deed reference;
  - (4) If applicable, the subdivision approval number and construction approval number;
  - (5) A statement that the owner understands that the well will be located closer than the recommended extent of a protective well radius to the property line;
  - (6) A statement that the owner understands that current state law does not protect the well beyond the boundary of the property and that the rules of the department allow an effluent disposal system to be installed as close as 10 feet to the property line, which might result in an effluent disposal system on abutting property being installed closer than 75 feet to the well;
  - (7) A statement that the owner understands that s/he cannot prevent an effluent disposal system from being installed on abutting property within 10' of the property boundary solely on the basis of the well location;
  - (8) A statement that the owner understands that with proper well construction, including drilling the well into bedrock, casing the well and sealing the casing, the risk of contamination from any effluent disposal system closer than 75 feet to the well can be minimized; and
  - (9) A statement that the owner understands that s/he might have no cause of action against the State of New Hampshire or any owner of the abutting property if the well becomes contaminated due to the decreased set-back distance.
- (b) The owner(s) of the property shall sign and date the release form and shall cause the form to be recorded at the appropriate registry of deeds.
- (c) The owner(s) of the property shall submit a copy of the executed release form to the department and to the local code enforcement officer or other local official designated by the municipality.

Source. #5949, eff 1-6-95; ss by #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1008.10); ss by #7079, eff 8-26-99

## PART Env-Ws 1009 SEWER LINES

Env-Ws 1009.01 Crossing Water Lines. Where water lines must cross a sewer line, the sewer line shall be at least 18 inches below the water line, unless the water line is encased in concrete or pipe having an SDR of 26 for a distance of 10 feet either side of the sewer line.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1009.02 Manholes in Long Runs. Manholes shall be provided every 350 feet in long sewer runs and shall occur at each change in slope or direction. Manholes shall be designed to conform to standards set for municipal installations in Env-Ws 700. When the run of a gravity sewer is greater than 100 feet but manholes are not used, a clean out shall be provided every 100 feet.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1009.03 Type of Pipe. Pipe used under wheel loads shall be designed and installed to meet AASHTO, 17th edition, H-20 specifications. Such pipe under areas that are not covered by snow in a year of average snowfall shall be buried at least 4 feet underground or shall be insulated.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1009.04 Calculating Infiltration. Sewer and manhole infiltration shall be figured into the flow figures established by Env-Ws 1008.03 for sewers over 100 feet long. Pipe infiltration shall be figured as 300 gallons per inch diameter per mile per day. Manhole infiltration shall be figured as one gallon per vertical foot per day.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1009.05 Slope.

- (a) Slope of pipeline from buildings to septic tank shall be not less than 2% and not more than 15%.
- (b) The sewer line for 10 feet leading to the tank inlet shall not be above the ground's surface.
- (c) The slope from the septic tank to the distribution box shall be not less than 1/8 inch per foot.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1010 SEPTIC TANKS

### Env-Ws 1010.01 Liquid Capacity of Tanks.

- (a) The minimum septic tank capacity for residential buildings having no more than 2 bedrooms shall be 1000 gallons.
- (b) For each additional bedroom up to 10, tank size shall be increased by 250 gallons per bedroom.
- (c) If a garbage grinder is or will be used in the structure served by the tank, the tank size shall be increased by 50%.
- (d) Where raw sewage is to be pumped the tank volume shall be twice the volume otherwise required. This shall be accomplished by tank duplication or compartmentalization.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.02 Capacity for Non-Residential Sewage Loads. Liquid capacity for tanks serving non-residential sewage loads shall be 1000 gallons or calculated as follows, whichever is greater:

- (a) For flows of up to 1500 gallons per day, the volume shall be 1-1/2 times the daily sewage flow; and
- (b) For flows of 1500 gallons per day and up, the volume shall be 1125 gallons plus 75% of the daily flow.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.03 Watertightness.

(a) Septic tanks shall be watertight and constructed of materials not subject to corrosion or decay, such as concrete, or fiberglass.

(b) A concrete tank shall be sealed so as to be watertight if in sections.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.04 Backfill. Backfill around septic tanks shall be made in thin layers compacted in a manner that shall not damage the structural integrity of the tank.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.05 Access.

(a) Access shall be provided to each compartment of the tank for inspection and cleaning.

(b) Both the inlet and the outlet baffles shall be accessible. Access shall be provided to each compartment by means of either a removable cover or a 20-inch manhole in the least dimension at a depth of no more than 6 inches below the final grade.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.06 Cover of Tank. The top or cover of the tank shall be reinforced if made of

concrete. For normal locations in grass areas, where the tank will not be subject to heavy loads from vehicles and the like, the concrete slab shall be at least 3 inches thick, reinforced with No. 6 gauge wire mesh, 4 inches on center both ways. Vehicles or construction equipment such as tractors or bulldozers shall not be permitted to

travel over any septic tank unless the tank has an AASHTO, 17th edition, rating of H-20 or better. The entire tank shall be designed for the expected maximum load condition.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.07 Inlet and Outlet Baffles. The outlet baffle shall be a vented tee which shall extend to a distance below the surface equal to 40% of the liquid depth. The outlet and inlet baffle shall extend above the liquid line to not less than one inch from the top of the tank.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.08 Venting. A vented inlet tee or baffle shall be provided to divert the incoming sewage downward. It shall penetrate at least 6 inches below the liquid level, but in no case shall the penetration be greater than that allowed for the outlet device.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.09 Sealing of Pipes. Pipes leading to and exiting from septic tanks shall be sealed with either non-shrink mortar, thick plastic cement, or other sealant having the same or better durability and sealing capability.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by

#7079, eff 8-26-99

Env-Ws 1010.10 Storage Above Liquid Level. For tanks having straight, vertical sides, the distances between the top of the tank and the liquid line shall be equal to approximately 20% of the liquid depth.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.11 Liquid Depth. The liquid depth shall not exceed 5 feet for septic tanks of less than 3,000 gallon capacity and shall not exceed 6 feet for larger tanks. Deeper tanks may be used, but the volume shall be calculated on the basis of the liquid depth established by this rule.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.12 Compartments. Tanks may be separated into 2 compartments if the first compartment equals  $\frac{2}{3}$  of the total volume. An access manhole shall be provided to each compartment in accordance with Env-Ws 1010.05. Venting between compartments shall be provided to allow free passage of gas. Inlet and outlet fittings in the compartment tank shall be proportioned as for a single tank. The same allowance shall be made for storage above the liquid line as in a single tank.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1010.13 Multiple Tanks. Where large septic tanks are needed, 2 tanks may be used in series. The first tank shall be  $\frac{2}{3}$  the required size.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by

#7079, eff 8-26-99

## PART Env-Ws 1011 AERATION TANKS

Env-Ws 1011.01 Use. If an aeration tank is used as a substitute for a septic tank, an effluent disposal area designed in accordance with these rules shall be used to dispose of the effluent.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1011.02 Service Contract. The department shall not give operational approval for aeration tanks unless the applicant provides a copy of an executed service contract for the continued maintenance of the aeration tank by a qualified service technician.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1012 GREASE TRAPS AND FLOOR DRAINS

Env-Ws 1012.01 Use. A grease trap shall be used in sewage disposal systems for non-residential food handling and preparation facilities.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1012.02 Size. The grease trap size shall be based on a minimum hydraulic detention time of 36 hours and minimum tank size of 1000 gallons. The outlet shall be protected with a baffle that extends downward and terminates 6 inches from the inside bottom of the grease trap.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,

EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1012.03 Floor Drains. Floor drains shall not be allowed unless approved pursuant to Env-Ws 1500.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1013 SEWAGE PUMPS AND SIPHONS

Env-Ws 1013.01 Pump Alarms.

(a) Each pump shall have a visual and/or audible alarm that signals if the pump fails for any reason.

(b) Separate electronic circuits shall be provided for pump(s) and alarm system(s).

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1013.02 Pump Chamber.

(a) The pump chamber shall be water-tight and vented.

(b) The capacity of the pump chamber shall be such that the pump or siphon can be set to dose each field a minimum of 3 to 4 times per day.

(c) If duplicate pumps are not provided, the dosing chamber shall be equipped with a high water alarm that shall signal at the building served.

(d) The dosing chamber shall have a reserve capacity above the active dosing volume equal to one day's flow.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1013.03 Siphons. The use of a single siphon shall be an acceptable method for dosing of sewage effluent. Double alternating siphons shall not be allowed.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

## PART Env-Ws 1014 EFFLUENT DISPOSAL AREAS- GENERAL REQUIREMENTS

### Env-Ws 1014.01 Receiving Layer.

(a) The receiving layer for an effluent disposal system shall meet the following criteria before a site is considered suitable for modification, as needed, for system design and approval:

- (1) There shall be no wetlands that have very poorly drained soils, determined in accordance with Env-Ws 1002.84, 1014.02 and 1014.03, under or within 75 feet laterally of the proposed system;
- (2) If the proposed effluent disposal area is to be within 75 feet of a wetland boundary, then areas delineated as wetlands shall be further classified as having poorly drained or very poorly drained soils, in accordance with Env-Ws 1002.55, 1002.84, 1014.02 and Env-Ws 1014.03;
- (3) There shall be no poorly drained jurisdictional wetlands, determined in accordance with Env-Ws 1002.55 and 1014.03, under or within 50 feet of the proposed system;
- (4) There shall be at least 2 feet of permeable soil above any impermeable subsoil;
- (5) There shall be at least 3 feet of soil above bedrock; and
- (6) The extent of the receiving layer with respect to paragraph (4) and (5) shall be under and a minimum of 35 feet downgradient of the proposed effluent disposal area, but no less than the distance required for any side and downgradient fill extension.

(b) The 2 feet of permeable soil above any impermeable subsoil required by paragraph (a)(4) above may be created by placing fill onto the subsoil, subject to the following conditions:

- (1) The fill shall meet the criteria of paragraph (d) below; and
- (2) Any state or local permits necessary to place the fill shall be obtained.

(c) The 3 feet of soil above bedrock required by (a)(5) above may be created by placing fill onto the subsoil, subject to the following conditions:

- (1) There is an average of 18 inches of natural soil above the bedrock;
  - (2) The fill shall meet the criteria of paragraph (d), below;
  - (3) Any state or local permits necessary to place the fill shall be obtained; and
  - (4) Fill shall be placed prior to the department issuing subdivision approval.
- (d) Fill used to create a receiving layer in accordance with this section shall:
- (1) Contain no tree stumps, sawdust, wood chips, tree bark, bricks, asphalt, concrete, metal, wallboard, construction debris, or other such non-soil materials;
  - (2) Contain no more than 25% by volume of cobbles larger than 6 inches in diameter or stones larger than 12 inches in diameter;
  - (3) Have a percolation rate of not greater than 15 minutes per inch after placement and compaction; and
  - (4) Be homogeneous, and if bedding planes or other discontinuities are present, detailed soil analysis from a person or laboratory qualified to perform the analysis shall be submitted with the application to establish that the fill meets the above criteria.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

#### Env-Ws 1014.02 Basis for Poorly and Very Poorly Drained Soils.

- (a) Criteria for poorly drained soils are designed to identify soil conditions where the presence of soil water comes within the upper part of the soil surface during the growing season.
- (b) Criteria for very poorly drained soils are designed to identify soil conditions where the presence of water occurs at or above the soil surface during the growing season to promote the accumulation of a significant organic surface layer.

Source. (See Revision Note at chapter heading for Env-Ws 1000); ss by #7079, eff 8-26-99

#### Env-Ws 1014.03 Delineation of Wetlands; Hydric Soils Determination.

- (a) Wetlands shall be delineated on the basis of hydrophytic vegetation, hydric soils, and wetlands hydrology in accordance with the techniques outlined in the "Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1", January 1987. The hydric soil

component shall be determined by using the "Field Indicators for Identifying Hydric Soils in New England, Version 2", July 1998.

(b) For sites in an undisturbed natural state, the presence or absence of hydric soils shall be determined by evaluating shovel or auger holes to a depth of 2 feet. A sufficient number of holes shall be dug to establish the hydric soil boundary to within 5 feet.

(c) The suitability of a site as a receiving layer shall be determined in accordance with (d) below if any of the following apply:

(1) No fill has been placed on the site, but the natural vegetation and soil have been disturbed to the extent that it is not possible to determine the presence or absence of hydric soils based on a visual examination of the soil horizons revealed by shovel or auger holes; or

(2) Fill has been placed on the site prior to 1967 for tidal areas, or prior to 1969 for freshwater areas, or pursuant to authorization of the New Hampshire water resources board prior to 1979, or pursuant to a valid permit from the New Hampshire wetlands board issued prior to August 9, 1996, or issued by the department pursuant to RSA 482-A, and either:

a. Visual examination of a test pit establishes that the original soil was hydric, or

b. It cannot be determined by a visual examination of a test pit whether the original soil was a hydric soil or not.

(d) If any of the conditions set forth in (c) above apply, the presence of a suitable receiving layer shall be determined based on the hydrology of the site as shown by data obtained from piezometric monitoring wells in accordance with the following:

(1) One monitoring well shall be placed in the proposed leaching area and one monitoring well shall be placed at a point between 65 and 75 feet downgradient of the proposed leaching area;

(2) Additional monitoring wells shall be installed as needed to establish the 20,000 square foot area required for subdivision applications;

(3) Water level readings shall be taken every 2 weeks;

(4) Water level readings may be taken more often at the option of the property owner;

(5) All readings taken shall be submitted quarterly, in writing, to the department;

(6) Water levels shall be monitored for a period of 2 years;

(7) Based on the recorded data, the applicant shall estimate the seasonal high water table, taking into account weather conditions such as the amount of precipitation over the period, major storm events, frosts and thaws;

(8) The applicant shall submit the estimate together with supporting data to the department;

(9) The receiving layer shall be deemed suitable if the estimated seasonal high water table is no closer than 15 inches to the existing ground surface.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.02)

Env-Ws 1014.04 Distance Above Impermeable Substratum. The bottom of the effluent disposal area shall be 4 feet above bedrock or any impermeable substratum.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.03)

Env-Ws 1014.05 Distance Above Seasonal High Water Table. The bottom of the effluent disposal area shall be at least 4 feet above the seasonal high water table.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.04)

Env-Ws 1014.06 Sloping Sites. When the design shows that at least 50% of the bed or trench area meets the requirements established by Env-Ws 1014.04 and Env-Ws 1014.05, a reduction in the distances required by Env-Ws 1014.04 and Env-Ws 1014.05 shall be allowed for effluent disposal areas to be

constructed on a slope. However, at no time shall any reduction result in any portion of the bed bottom being less than 24 inches to seasonal high water table or ledge.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1014.055); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.05)

Env-Ws 1014.07 Spot Elevations Required. Where reductions are being taken pursuant to Env-Ws 1014.06, the applicant shall provide spot elevations of the original grade at the corners of the proposed EDA and calculations to show that Env-Ws 1014.06 conditions are met.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.055); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.06)

Env-Ws 1014.08 Size of Effluent Disposal Area for Stone and Pipe Beds.

- (a) Effluent disposal systems shall be designed for a minimum of 2 bedrooms.
- (b) The size of effluent disposal areas for stone and pipe beds shall be determined by the number of bedrooms, percolation rates, and total sewage flow per day as set forth in Table 1014-1 below:

Table 1014-1 Effluent Disposal Areas for Stone and Pipe Beds

In Square Feet

for Varying Loads And Percolation Rates

Number of Bedrooms

Percolation					
Rates	2	3	4	Each Add'l	Commercial
Minutes	300 GPD	450 GPD	600 GPD	Bedroom	Per 100 GPD
Per Inch					
Square Feet					
2	400	560	750	188	125
4	425	617	825	210	140
6	450	675	900	233	155
8	500	750	1000	255	170

10	550	825	1100	278	185
12	600	900	1200	300	200
14	637	955	1275	319	213
16	675	1010	1350	338	225
18	712	1065	1425	357	237
20	750	1120	1500	375	250
22	775	1158	1550	387	258
24	800	1196	1600	400	266
26	825	1234	1650	412	274
28	850	1272	1700	425	282
30	875	1310	1750	437	290
32	900	1348	1800	449	298
34	925	1386	1850	462	306
36	950	1424	1900	475	314
38	975	1462	1950	488	322
40	1000	1500	2000	500	330
42	1050	1575	2100	525	347
44	1100	1650	2200	550	364
46	1150	1725	2300	575	381
48	1200	1800	2400	600	398
50	1250	1875	2500	625	415
52	1300	1950	2600	650	432
54	1350	2025	2700	675	449
56	1400	2100	2800	700	466

58	1450	2175	2900	725	483
60	1500	2250	3000	750	500

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.06); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.07)

Env-Ws 1014.09 Excavation. Any person excavating for an effluent disposal area shall:

- (a) Protect the natural absorption qualities of the soil;
- (b) Protect open excavation from storm runoff to prevent the entrance of silt and debris; and
- (c) Rake all smeared or compacted surfaces to a depth of one inch, remove loose material before the fill or uniform crushed stone is placed or, in the case of chambers, the sand bed is constructed.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97 (from Env-Ws 1014.07); ss by #7079, eff 8-26-99 (formerly Env-Ws 1014.08)

Env-Ws 1014.10 Type of Stone for Beds or Trenches.

- (a) The pipe, laid in a bed or trench of sufficient width and depth, shall be supported by clean, uniformly sized washed crushed stone, washed rock or similar aggregate free from iron, fines and clay. To limit the amount of small stone and fines in the stone used in the construction of effluent disposal systems, the stone shall be approved septic stone as stated in (b), below.
- (b) Approved septic stone shall be 1.5 inch stone with a range of .75 inches to 2.5 inches and free of fines, in accordance with Table 1014-2, below.
- (c) Approved septic stone shall meet the sieve size and percent passing by weight requirements in accordance with AASHTO, 17th edition, test method T 11-85, which applies to septic stone available for retail purchase, as set forth in Table 1014-2, below:

Table 1014-2 Approved Septic Stone Requirements

	<u>SIEVE SIZE</u>	<u>PERCENT PASSING By Weight</u>
2 inch	100	
1 inch	90 - 100	
3/4 inch		0 - 20
#4		0 - 5
#200		0 - 1.5

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.08); ss by #7079, eff 8-26-99

#### Env-Ws 1014.11 Backfill.

- (a) Before placing earth backfill over the system, the stone shall be covered with untreated building paper, a 2 inch layer of hay, or filter fabric. An impervious covering such as tar paper shall not be used, as this interferes with ventilation.
- (b) No more than 12 to 18 inches of backfill shall be used to cover the system.
- (c) Backfill material shall be clean, permeable fill. After backfilling, the top of a new effluent disposal system shall be overfilled with 4 to 6 inches of earth to shed or resist storm water.
- (d) Machine tamping or hydraulic backfilling of the trench shall be prohibited.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.09); ss by #7079, eff 8-26-99

Env-Ws 1014.12 Storm Runoff. Where sloping ground is used for construction of the effluent disposal area, a small temporary dike or surface water diversion ditch shall be constructed above the effluent disposal

area to prevent the disposal area from being washed out by rain. The dike shall be maintained or the ditch kept free of obstruction until the effluent disposal area becomes well-covered with vegetation.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.10); ss by #7079, eff 8-26-99

Env-Ws 1014.13 Vehicular Traffic. Heavy machinery shall be excluded from the effluent disposal area unless special provision is made to support the weight. All machine grading shall be completed before components of the effluent disposal system are laid.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.11); ss by #7079, eff 8-26-99

Env-Ws 1014.14 Executed Easements. Proof of executed easements shall be required prior to approval if an effluent disposal system is located on property other than that on which the building(s) served by the effluent disposal system is/are located, unless the properties are owned by the same person.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1014.12); ss by #7079, eff 8-26-99

Env-Ws 1014.15 Foundation Drains Distance From Effluent Disposal Area or Septic Tank. The effluent disposal area may be closer than 25 feet and the septic tank or pump chamber closer than 10 feet to the foundation drain where the bottom of the cellar is at least 18 inches above the seasonal high water table, or where the basement slab is at the higher elevation than the finished grade of the effluent disposal area.

Source. #6451, eff 2-8-97 (from Env-Ws 1014.13); ss by #7079, eff 8-26-99

Env-Ws 1014.16 Water Table Less Than 15 Inches. For sites with the seasonal high water table less than 15 inches below original grade, the system design shall incorporate proposed drainage details designed to protect and maintain the receiving layer for the effluent disposal area.

Source. #6451, eff 2-8-97 (from Env-Ws 1014.14);  
ss by #7079, eff 8-26-99

## PART Env-Ws 1015 DISTRIBUTION BOXES

### Env-Ws 1015.01 Distribution Boxes.

(a) Distribution boxes shall be required for every effluent disposal area or trench system where there are multiple beds, trenches, or pipes except where pressure distribution in accordance with Env-Ws 1019 is used.

(b) Distribution boxes shall be designed to insure equal distribution of effluent to the several lateral lines. The bottom of the outlet lines shall be at the same height within the box.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1015.02 Velocity Reducing Devices. Velocity reducing devices such as an elbow or "T" shall be installed within the distribution box where the effluent line from the septic tank has a slope in excess of 10% or where effluent is being pumped.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (from Env-Ws 1015.03); ss by #7079, eff 8-26-99

Env-Ws 1015.03 Multiple Beds. Where 2 effluent disposal areas are used, a distribution box shall be set on a concrete slab to prevent settling.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-97 (formerly Env-Ws 1015.04); ss by #7079, eff 8-

PART Env-Ws 1016 CHAMBERS

Env-Ws 1016.01 Concrete Construction.

- (a) Each concrete chamber system shall be constructed on a 6 inch level bed of:
- (1) Medium to coarse textured sand, with an effective size of 0.25 to 2.0 mm, no greater than 5% passing the number 200 sieve, and no particles larger than 3/4 inch; or
  - (2) Materials meeting the ASTM C-33 specification.
- (b) Filter fabric or galvanized wire mesh and septic stone shall be placed around the outside perimeter of the chamber bed.
- (c) The effluent pipe shall empty into either a velocity reducing pit, a splash plate, or internal distribution system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1016.02 Venting. All chamber type systems shall be vented. Vent pipes shall be pitched down toward the chambers.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1016.03 Size of Effluent Disposal Area. For purposes of complying with Env-Ws 1014.08, the effective effluent disposal area for chamber systems shall be calculated as the sum of the length times the width of each chamber. For non-commercial applications this area shall be at least 60% of the area established in section Env-Ws 1014.08.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1016.04 Location Under Driveways. If chambers are located under driveways and parking areas, AASHTO, 17th edition, H-20, heavy duty chambers shall be used.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1017 LEACH BEDS

### Env-Ws 1017.01 Leach Lines.

- (a) Supply lines from the D-box to the laterals shall be solid pipe.
- (b) Leach lines shall be 4 inch perforated rigid pipe.
- (c) Tight connectors shall be used between the pipes, and the pipes shall be laid as level as possible.
- (d) The holes in the leach lines shall be positioned at the 5 and 7 o'clock positions.
- (e) The maximum leach line shall be 100 feet.
- (f) Leach lines shall be laid a maximum of 5 feet on center with 2.5 feet of septic stone from the pipes to the outside of the bed.
- (g) All leach lines shall come directly from the distribution box and each line shall come from a separate outlet from the distribution box.
- (h) The leach lines shall be sealed into the distribution box with non-shrink mortar, thick plastic cement or other sealants which can be shown by submission of manufacturer's literature with the application to be shrink-proof, water proof and will not deteriorate over time.
- (i) All leach lines shall be either interconnected or capped at the far end of the system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1017.02 Construction. The leaching bed shall consist of a minimum of 12 inches of stone total, with a minimum of 6 inches of stone under pipe and a minimum of 2 inches of stone over pipe.

Source. (See Revision Note at chapter heading for

Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1017.03 Level Requirement. Leaching pipes and the bottom of the effluent disposal area shall be as level as possible.

Source. #7079, eff 8-26-99

## PART Env-Ws 1018 TRENCHES

### Env-Ws 1018.01 Design Requirements.

- (a) Trenches shall be dug parallel to the contours of the land.
- (b) All lines shall be directly connected to the distribution box, if one is required by Env-Ws 1015.01.
- (c) All trenches shall be of equal length.
- (d) The leach lines shall be laid level in a bed of septic stone.
- (e) Trench bottom shall not be more than 5 feet below grade.
- (f) The first length of all distribution lines leading from the distribution boxes to the trenches shall be laid with the same pitch.
- (g) If chambers are used for non commercial applications, the effluent disposal area shall be at least 60% of the area required by Env-Ws 1014.08.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

### Env-Ws 1018.02 Width and Spacing.

- (a) Trench width and spacing shall be in compliance with the restrictions set forth in Table 1018-1 below:

Table 1018-1 Trench Width and Spacing

Trench Width <u>in inches</u>	Minimum distance between <u>centerline of trenches in feet</u>
----------------------------------	---

	12 to 18	6.0
18 to 24		6.5
24 to 30		7.0
30 to 36		7.5
36 to 48		8.0
48 to 60		See (b)

(b) Any trench of 48 to 60 inches in width which is greater than 3 feet below original grade shall be separated a minimum of 3 times the width.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1018.03 Construction Near Trees. Trenches constructed within 10 feet of large trees or dense shrubbery shall have at least 12 inches of uniform crushed stone beneath the leach pipe.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1018.04 Size of Effluent Disposal Area. Sidewall surfaces under the pipe invert in trench systems may be used in calculating the effluent disposal area. The effective effluent disposal area for

trenches shall be calculated as twice the effective sidewall surface added to the width, multiplied by the length. This total shall be multiplied by the number of trenches.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1019 PRESSURE DISTRIBUTION NETWORKS

Env-Ws 1019.01 Pressurized Distribution System.

- (a) A pressurized distribution system shall distribute effluent from a septic tank using small diameter pipe, with perforations, pressurized by pumps or siphons, such that the volume of water that flows out each hole is as equal as possible.
- (b) A pressurized distribution system shall lose 75 to 85 percent of the head in the network when the water passes through the holes.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1019.02 Design Requirements.

- (a) Hole size shall be within the range of 1/4 inch to 5/8 inch.
- (b) Maximum allowable hole spacing shall be 6 feet.
- (c) The perforation at the end of the lateral shall be drilled horizontally in the endcap near the crown of the pipe to facilitate venting.
- (d) In effluent disposal systems with pressure distribution, the lateral spacing of the pipes shall be approximately equal to the perforation spacing, and holes on adjacent laterals shall be staggered so that they lie on the vertices of equilateral triangles.
- (e) The dosing volume for pressure distribution shall be 5 to 10 times the network pipe volume. If duplicate pumps are not provided, the dosing chamber shall have a reserve capacity above the active dosing volume equal to one day's average flow.
- (f) The loading rate shall be 0.8 gallons per day per square foot.
- (g) The dose rate shall be 0.2 gallons per dose per square foot.
- (h) Basal area requirements shall be based upon the percolation rate as presently applied to conventional systems.
- (i) Fill material shall be:
  - (1) A medium to coarse textured sand, with an effective size of 0.25 to 2.0 mm., no greater than 5% passing the number 200 sieve, and no particles larger than 3/4 inch; or
  - (2) Materials meeting the ASTM C-33 specification.
- (j) The separation distances with respect to seasonal high water table, impermeable substratum, and ledge shall be as set forth in Env-Ws 1014.04 and Env-Ws 1014.05.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; amd by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1019.03 Mounding Minimization. The length to width ratio for bed areas shall be increased in order to minimize groundwater mounding potential, increase oxygen transfer levels, and increase downslope cross-sectional area.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1019.04 Application Requirements. The following shall appear on or with all plans and specifications for pressure distribution systems submitted for review:

- (a) All calculations as indicated on a pressure distribution worksheet in our appendix;
- (b) All details for network layout;
- (c) Pump/pump station or siphon details;
- (d) Network drainage to avoid freezing potential;
- (e) All construction methods for basal area preparation; and
- (f) Inspection/construction requirements as follows:
  - (1) "Basal area preparation to be inspected by system designer prior to fill placement. An inspection report shall be submitted to the regional inspector at the time of final inspection."
  - (2) "Caution to be exercised during fill placement/site preparation to avoid compaction or smearing of infiltrative surface."
  - (3) "Maintain 8-12 inches of fill between equipment tracks and prepared surface."

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss and moved by #6451, eff 2-8-

97 (from Env-Ws 1019.03); ss by #7079, eff 8-26-99

Env-Ws 1019.05 Construction Requirements.

- (a) The system designer shall inspect the basal area preparation prior to fill placement, and shall submit an inspection report to the regional inspector at the time of final inspection.
- (b) Compaction and smearing of infiltrative surface shall be avoided during fill placement and site preparation.
- (c) The installer shall maintain 8 to 12 inches of fill between equipment tracks and the prepared surface.

Source. #6451, eff 2-8-97 (from Env-Ws 1019.04); ss by #7079, eff 8-26-99

PART Env-Ws 1020 DRY WELLS

Env-Ws 1020.01 Masonry Units. If precast masonry units are used for dry wells, the portion of the dry well above the inlet pipe shall be laid with mortared joints or otherwise strengthened. Hard-burned brick, heavy-weight concrete block, structural clay tile and fieldstone shall be acceptable if properly laid to provide necessary structural strength. If cement blocks are used, the holes shall be laid vertically.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1020.02 Stone. 6 inches to 2 1/2 feet of septic stone shall be placed around the masonry work or precast unit. The horizontal distance of septic stone used shall not be more than 1/2 the inside diameter, or

narrowest inside dimension of the masonry work or precast unit. A minimum of 12 inches of septic stone shall be placed under the unit.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1020.03 Distance Between Wells. Multiple dry wells installed as part of the same effluent disposal system shall be separated by a distance equal to 3 times the diameter of the

largest dry well.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1020.04 Size of Effluent Disposal Area. For purposes of complying with Env-Ws 1014.08, the effective effluent disposal area for dry wells shall be the vertical wall area, based on the dug diameter, below the inlet. This surface area, of the bottom of the drywell, shall not be covered. The total area shall be at least 50% of the area established in Env-Ws 1014.08.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1020.05 Abandoned Wells. Abandoned wastewater dry wells shall be filled in with earth or stone.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1020.06 Precast Units. Precast units may be used and shall have at least one inlet and one inspection cover. Precast units shall be round or polygonal in cross-sectional shape.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1021 RAISED EFFLUENT DISPOSAL SYSTEMS

Env-Ws 1021.01 Foundation. The foundation of a building served by a raised effluent disposal system shall be constructed high enough to allow gravity feed to the system, unless a pump is used.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1021.02 Site Preparation. After the plans have been approved, the site shall be staked out in accordance with the plans. All trees, topsoil, roots and organic matter shall be removed from the area to be filled, including the area under the 3:1 slope.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1021.03 Fill Material. Fill required to raise the effluent disposal area above the seasonal high ground water table or impervious substratum shall be clean bank run sand, free of topsoil or humus, dredgings, or stones more than 6 inches in any dimension, except that the first 6 inches directly beneath the EDA shall consist of:

- (a) Medium to coarse textured sand, with an effective size of 0.25 to 2.0 mm, no greater than 5% passing the number 200 sieve, and no particles size larger than 3/4 inch; or
- (b) Materials meeting the ASTM C-33 specification.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff 6-24-92; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1021.04 Extension of Fill. The finish grade over the bed shall extend for a minimum of 5 feet beyond the bed before tapering off to a 3:1 slope. There shall be a minimum of a 3 inch layer of loam suitable for seeding and proper stabilization of the slope.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1021.05 Slope. The site of raised effluent disposal areas shall have a maximum of 33% natural slope.

Source. (See Revision Note at chapter heading for  
Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,  
INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

Env-Ws 1021.06 Retaining Walls. The use of retaining walls and foundations used as retaining walls shall not be allowed as a substitute for the 3:1 slope.

Source. (See Revision Note at chapter heading for  
Env-Ws 1000) #4926, eff 9-5-90; ss by #6329,  
INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

## PART Env-Ws 1022 ALTERNATE SYSTEMS

### Env-Ws 1022.01 Privies.

(a) Privies shall be located at least 75 feet from wells, surface water and neighbor's foundations.

(b) Any pit less than 4 feet above the seasonal high water table and/or 4 feet above ledge or impermeable soil shall be sealed.

Source. (See Revision Note at chapter heading for  
Env-Ws 1000) #4926, eff 9-5-90; ss by #5424, eff  
6-24-92; ss by #6329, INTERIM, eff 9-6-96,  
EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97,  
EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by  
#7079, eff 8-26-99

### Env-Ws 1022.02 Mini-Dry Well.

(a) If there will be no running water to, or wastewater discharge from, the dwelling, a mini-dry well shall be used for the disposal of grey water. This mini-dry well shall be 75 feet from wells and surface waters.

(b) A mini dry well shall be a hole up to 18 inches in diameter and 12 inches deep, filled with stone or gravel.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

#### Env-Ws 1022.03 Holding Tanks.

(a) Holding tanks or closed systems shall not be approved except in the following instances:

(1) As a replacement for an existing system in failure when no other means of disposal is practical; or

(2) When connection to a municipal sewer will be within one year of approval of the holding tank application.

(b) Holding tanks shall be water-proofed and provided with an alarm system to indicate when the tank is full and requires pumping.

(c) Any person applying for a holding tank approval shall submit with the application a copy of the signed contract with a licensed septage hauler which shall identify one or more approved disposal sites to which the septage will be hauled.

(d) The owner of the property on which a holding tank has been installed shall retain all receipts for pumping services and shall submit copies of said receipts to the local health officer on a quarterly basis. Past receipts shall be retained for a period of 2 years.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

### PART Env-Ws 1023 OPERATING REQUIREMENTS

#### Env-Ws 1023.01 Septic Tank Inspection and Pumping Requirements.

(a) Septic tanks shall be inspected for accumulation of sludge and surface scum at least once every year.

(b) When the combined thickness of the sludge and surface scum equal  $\frac{1}{3}$  or more of the tank depth, the tank shall be pumped by a licensed septic tank pumper.

Source. (See Revision Note at chapter heading for

Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1023.02 Disposal of Grease and Bulky Waste. To prevent obstruction of the distribution lines and effluent disposal system, grease and bulky wastes shall not be flushed or otherwise introduced into the septic system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1023.03 Disposal of Toxic and Hazardous Materials. Toxic and hazardous materials shall not be flushed or otherwise introduced into the septic system.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1023.04 Protection of Distribution Lines and Effluent Disposal Area. To prevent damage to the distribution lines and effluent disposal area, vehicles, livestock and other heavy objects shall not be allowed on the effluent disposal area.

Source. (See Revision Note at chapter heading for Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1023.05 Indications of Possible Septic System Failure Requiring Inspection. If wet areas appear on the ground surface above the distribution lines or effluent disposal area or if disagreeable odors occur, the system shall be inspected for the source of these problems, and action shall be taken to correct the source of the problem.

Source. (See Revision Note at chapter heading for

Env-Ws 1000) #4926, eff 9-5-90; ss by #6329, INTERIM, eff 9-6-96, EXPIRED 1-4-97

New. #6421-A, EMERGENCY, eff 1-7-97, EXPIRES: 5-7-97; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

## PART Env-Ws 1024 INNOVATIVE/ALTERNATIVE TECHNOLOGY

### Env-Ws 1024.01 Purpose and Scope.

- (a) The purpose of this part is to provide the methodology and review process for the approval of innovative/alternative individual sewage disposal systems, in compliance with RSA 485-A:29, I.
- (b) This part shall apply to any proposed individual sewage disposal system technology not described elsewhere in Env-Ws 1000.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

### Env-Ws 1024.02 Definitions.

- (a) "Conventional system" means an individual sewage disposal system regulated under Env-Ws 1000 other than Env-Ws 1024.
- (b) "Innovative/Alternative waste treatment" as defined in RSA 485-A:2, XXI, includes individual sewage disposal systems.
- (c) "ITA" means innovative/alternative technology approval.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

### Env-Ws 1024.03 Responsibility for Repair and Replacement.

- (a) If the system will require ongoing professional maintenance, a service contract for such maintenance shall be executed before operational approval is granted.
- (b) In exchange for obtaining the benefit of an operational approval based on innovative/alternative technology, the owner shall covenant to replace the innovative/alternative system with a conventional system should the innovative/alternative system fail to operate lawfully. The covenant shall be recorded by the owner at the registry of deeds where the property is located.
- (c) The covenant shall include the following additional statements:
  - (1) The covenant shall run with the land; and
  - (2) The covenant shall be binding on the grantee, and the grantee's successors and

assigns.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97;  
ss by #7079, eff 8-26-99

Env-Ws 1024.04 ITA Applications.

(a) Before an innovative/alternative waste treatment system may be used, the technology shall be evaluated and approved in an ITA.

(b) To obtain an ITA, an owner, designer, or other person shall submit a letter of application that includes the following:

- (1) A written description of the proposed system;
- (2) All operational reports, patent information, technical reports, and laboratory reports published on the proposed system, even if the information might in whole or in part reflect negatively on the system;
- (3) A description of any advantages of the proposed system over conventional systems in the prevention of health hazards, surface and groundwater pollution, and any other environmental benefits;
- (4) A description of the possible risks to public health, surface or ground waters, or other aspects of the environment of using the proposed system;
- (5) The names, addresses, and phone numbers of at least 3 individuals who have experience in the design and operation of the same type of system, if available;
- (6) The proposed system's effect on the area of land required for operation;
- (7) A list of any rules under Env-Ws 1000 for which waivers will be required; and
- (8) A list of site locations where the system has been used, whether successfully or not.

(c) If information addressing more than one category of (b)(1) through (8) is found within the same document, the applicant shall identify on a separate sheet of paper which categories are covered in that document, listed by page number.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97;  
ss by #7079, eff 8-26-99

Env-Ws 1024.05 ITA Evaluation.

(a) The department shall evaluate the application using the criteria in Env-Ws 1024.07, within the time periods specified in RSA 541-A: 29.

(b) The department shall approve the proposed system if, based on its evaluation of the available information, it makes its best engineering judgment that:

- (1) The proposed system will be at least as protective of the environment as a conventional system; and
- (2) The proposed system will function as well or better than a conventional system.
- (c) If the department approves the technology for use, it shall notify the applicant in writing and shall publish a notice in an agency newsletter that an ITA has been issued.
- (d) If based on its evaluation the department finds that the applicant has not demonstrated that the technology will meet the criteria specified in (b), above, the department shall notify the applicant in writing, and shall identify the specific reasons why the department believes the technology to be unsuitable.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97;  
ss by #7079, eff 8-26-99

Env-Ws 1024.06 Form and Effect of an Innovative/Alternative Technology Approval.

- (a) If operation and maintenance requirements are necessary to ensure that the system shall function as well as or better than a conventional system, the department shall make such conditions part of the approval.
- (b) Once granted, an ITA shall constitute evidence that the department has reviewed the literature submitted and determined that the technology as presented is reasonably expected to be capable of adequately treating sewage provided that any restrictions noted are adhered to, and that the technology is approved for purposes of applying for site-specific construction approvals under Env-Ws 1003 and Env-Ws 1004. An ITA shall not be construed as evidence of suitability of the technology for any particular lot. Obtaining an ITA shall not abrogate the necessity of obtaining both a design approval and operational approval before using the proposed system.
- (c) The applicant shall furnish a copy of the ITA when applying for approvals under Env-Ws 1003 and Env-Ws 1004.
- (d) The department shall issue ITA's of 3 types, provisional, general, and general with reference to a manual, described as follows:
  - (1) A provisional approval shall be issued when the department determines that there is not sufficient operating history or other valid data to allow general use of the technology, in accordance with the criteria in Env-Ws 1024.07, and the following criteria:
    - a. Provisional approvals shall be for up to 50 installations over a time period of up to 5 years;
    - b. Provisional approvals may be renewed by making a new application;
    - c. The department shall require that the applicant conduct performance testing during the provisional approval period stated in the approval if evaluation of the criteria in Env-Ws 1024.07 indicates the need to do so;
    - d. In the case of c above, the applicant shall be required to report to the

department describing the performance of the innovative/alternative technology during the provisional approval period stated in the approval;

e. After the provisional approval period, the applicant may apply for a general approval based on the documented performance of the technology; and

f. The department shall issue provisional approvals as a draft to the applicant before issuing a final provisional approval, to allow for negotiations on the various conditions;

(2) A general approval shall be issued when the department determines that there is sufficient operating history, or other valid data, to allow general use of the technology, in accordance with the following:

a. General approvals shall not expire;

b. If the performance of the technology in actual field applications is such that water quality and public health are not protected, the department shall modify or rescind the general approval; and

(3) The department shall issue a general approval of an innovative/alternative technology which includes a reference to a specific design manual supplied by the applicant when such is the case, in accordance with the following requirements:

a. Designs submitted under such an approval shall be in strict accordance with the approved design manual; and

b. Any modification to the design manual shall be considered a new application.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97;  
ss by #7079, eff 8-26-99

#### Env-Ws 1024.07 Evaluation Criteria.

(a) The proposed system shall be at least as protective of the environment as a conventional system.

(b) Overall, the proposed innovative/alternative system shall function as well as or better than a conventional system in the following areas:

(1) Operational reliability, which shall include one or more of the following:

a. Decreased susceptibility to system failure;

b. Reduced occurrence of inadequately treated discharges; and

c. Decreased levels of required operator attention and skills; and

(2) Effluent quality, which shall include removal of:

a. Five-day biochemical oxygen demand (BOD<sub>5</sub>);

- b. Total suspended solids (TSS);
- c. Nitrogen;
- d. Phosphorus; and
- e. Fecal coliform.

(c) When evaluating an applicant's design manual, the department shall review the material in the manual to ensure that:

- (1) The intent of these rules is met;
- (2) A system built following the design manual will be constructable and inspectable .

(d) The following criteria shall be used to determine whether performance testing shall be required:

- (1) The amount of data available to support claims of performance and operational reliability;
- (2) The quality of data available to support claims of performance and operational reliability;
- (3) The length of time the particular innovative/alternative technology has been in use;
- (4) The complexity of the particular innovative/alternative technology;
- (5) The modes of failure of the particular innovative/alternative technology; and
- (6) The consequences of failure of the particular innovative/alternative technology.

Source. #5949, eff 1-6-95; ss by #6451, eff 2-8-97;  
ss by #7079, eff 8-26-99

#### PART Env-Ws 1025 WATERFRONT PROPERTY SITE ASSESSMENT STUDY

Env-Ws 1025.01 Conduct of Site Assessment. Pursuant to RSA 485-A:39, prior to the execution of a purchase and sale agreement for any developed waterfront property the owner shall have a site assessment study performed, which shall include an on-site inspection. The assessment shall be documented by completion of a "Site Assessment Form" by a permitted designer.

Source. #4608, eff 5-1-89; ss by #5748, eff 11-30-93; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1025.02 Assessors. All site assessment studies shall be conducted by a septic system designer permitted pursuant to RSA 485-A:35, I. If the design flow of the system existing on the site to be assessed is greater than 2500 GPD, the assessor shall also be a civil or sanitary engineer licensed in the state of New Hampshire.

Source. #4608, eff 5-1-89; EXPIRED 5-1-95

New. #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1025.03 Site Assessment Form. Copies of the blank site assessment form may be obtained upon request to the public information and permitting office of the department.

Source. #4608, eff 5-1-89; ss by #5748, eff 11-30-93; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99

Env-Ws 1025.04 Form. A permitted designer shall fill out a site assessment form with the following information:

- (a) The name, address, and telephone number of the current owner of the property;
- (b) The name, address, and telephone number of the seller's agent;
- (c) The name, address, telephone number, and permit number of the designer who is conducting the site assessment study;
- (d) The location of the lot, including the city or town in which the property is located, the tax map and lot number, street address, and subdivision name;
- (e) A brief description of the property and any structures thereon, including the number of bedrooms;
- (f) The name(s) and mailing address(es) of abutters to the property, if known;
- (g) The lot size in square feet;
- (h) The slope of the lot;
- (i) The loading capacity of the lot, calculated based on lot size, slope and soil type;
- (j) The type of water supply to the lot;
- (k) The soil type from U.S. Natural Resources Conservation Service maps or actual data, if available;
- (l) The estimated seasonal high water table from U.S. Natural Resources Conservation Service maps or actual data, if available;
- (m) Identification of plans and other written materials reviewed and the date of the on-site investigation;
- (n) The assessor's opinion as to whether the site can support a system meeting current specifications for the existing structure;
- (o) Whether the property currently has any sewage disposal system; and
- (p) Whether the existing system is state approved.

Source. #4608, eff 5-1-89; EXPIRED 5-1-95

New. #6451, eff 2-8-97; ss by #7079, eff 8-26-99(formerly Env-Ws 1025.05)

Env-Ws 1025.05 Attachments to the Site Assessment Form.

- (a) If the system is state approved, the approval number and a copy of the approved plan, construction approval and operational approval shall be attached to the original of the form by the permitted designer.
- (b) If the system is not state approved, the owner shall provide all available information on the type, capacity, age and location of the system.
- (c) Whether the system is state approved or not, a site assessment sketch shall be attached to and made part of the site assessment form.

Source. #4608, eff 5-1-89; amd by #5748, eff 11-30-93; ss by #6451, eff 2-8-97; ss by #7079, eff 8-26-99 (formerly Env-Ws 1025.06)

Env-Ws 1025.06 Site Assessment Sketch. The site assessment sketch shall be an 8-1/2" X 11" sketch to scale or with dimensions shown of the property and the location of the system, approximate property lines and approximate locations of abutters' septic systems and wells with 75' well radius, if known. Such sketches shall not be deemed to be a precise survey of the property.

Source. #4608, eff 5-1-89; EXPIRED 5-1-95

New. #6451, eff 2-8-97 (from Env-Ws 1025.06); ss by #7079, eff 8-26-99 (formerly Env-Ws 1025.07)

Env-Ws 1025.07 Site Assessment Study Updates.

- (a) For a subsequent sale of a developed waterfront property for which a site assessment study has been conducted for a previous sale and upon which no change in the information required by Env-Ws 1025.04(d), (e), (g) through (l), or (n) through (p) has occurred, the property owner and assessor may certify that no change in the information required has occurred in lieu of conducting a new site assessment.
- (b) The updated certification shall be attached to the original site assessment study, if available, or to a copy of the original site assessment study, and the updated site assessment study shall be made available to prospective buyers of the property in the same manner as original site assessment studies.
- (c) The update to the site assessment study shall contain the following information:
  - (1) The name, address, and telephone number of the current owner of the property;
  - (2) The name, address, and telephone number of the seller's agent;
  - (3) The name, address, telephone number, and permit number of the designer who is conducting the site assessment study; and

(4) The name(s) and mailing address(es) of abutters to the property, if known;

(d) The buyers shall agree to and sign the following statement on the update to the Site Assessment Form at the time of the closing:

The undersigned certifies/y that I/we have reviewed this Site Assessment Form and understand the information contained herein and that I/we have received a copy of this Site Assessment Form.

Source. #4608, eff 5-1-89; EXPIRED 5-1-95

New. #6451, eff 2-8-97 (from Env-Ws 1025.10); ss  
by #7079, eff 8-26-99 (formerly Env-Ws 1025.11)

Env-Ws 1025.08 Buyers' Signature Required. The buyers shall agree to and sign the following statement on the "Site Assessment Form" at the time of the closing:

The undersigned certifies/y that I/we have reviewed this Site Assessment Form and understand the information contained herein and that I/we have received a copy of this Site Assessment Form.

Source. #4608, eff 5-1-89; EXPIRED 5-1-95

New. #6451, eff 2-8-97 (from Env-Ws 1025.09); ss  
by #7079, eff 8-26-99 (formerly Env-Ws 1025.10)

PART Env-Ws 1026 DESIGNERS AND INSTALLERS PERMIT REVIEW COMMITTEE - EXPIRED

Source. #4622, eff 6-1-89; EXPIRED 6-1-95

PART Env-Ws 1027 REVIEW OF PERMITS - EXPIRED

Source. #4622, eff 6-1-89; EXPIRED 6-1-95

PART Env-Ws 1028 HEARINGS AND APPEALS - EXPIRED

Source. #4622, eff 6-1-89; EXPIRED 6-1-95

<b>Provision of the Proposed Rule</b>	<b>Specific State Statute which the Rule is Intended to Implement</b>
Env-Ws 1001.01	RSA 485-A:1
Env-Ws 1001.02	RSA 485-A:41, IV

PART Env-Ws 1002	RSA 485-A:2; RSA 485-A:29, I
Env-Ws 1003.01	RSA 485-A:29, I
Env-Ws 1003.02	RSA 485-A:31 and RSA 485-A:29, I
Env-Ws 1003.03 through Env-Ws 1003.06	RSA 485-A:29, I
Env-Ws 1003.07	RSA 485-A:35, I
Env-Ws 1003.08	RSA 485-A:35, II
Env-Ws 1003.09 through Env-Ws 1003.12	RSA 485-A:29, I
Env-Ws 1003.13	RSA 485-A:30-a
Env-Ws 1003.14	RSA 485-A:29, I
Env-Ws 1003.15	RSA 485-A:30-a and RSA 485-A:31
Env-Ws 1003.16 and Env-Ws 1003.17	RSA 485-A:41 and RSA 485-A: 30-a
Env-Ws 1003.18	RSA 485-A:30-b
Env-Ws 1003.19 and Env-Ws 1003.20	RSA 485-A:29, I
Env-Ws 1004.01 through Env-Ws 1004.03	RSA 485-A:29, I
Env-Ws 1004.04	RSA 485-A:32
Env-Ws 1004.05 through Env-Ws 1004.13	RSA 485-A:29, I
Env-Ws 1004.14 through Env-Ws 1004.16	RSA 485-A:38
Env-Ws 1004.17	RSA 485-A:30
Env-Ws 1004.18 and Env-Ws 1004.19	RSA 485-A:29, I
Env-Ws 1005.01	RSA 485-A:29, I
Env-Ws 1005.02 through Env-Ws 1005.04	RSA 485-A:34
Env-Ws 1005.05	RSA 485-A:30-b, III
Env-Ws 1005.06	RSA 485-A:30-b, III
Env-Ws 1005.07 and Env-Ws 1005.08	RSA 485-A:29, I

Env-Ws 1005.09	RSA 485-A:34
Env-Ws 1005.10 through Env-Ws 1005.13	RSA 485-A:29, I
PART Env-Ws 1006	RSA 485-A:29, I and RSA 485-A:34, I
PART Env-Ws 1007	RSA 485-A:29, I and RSA 485-A:34, I
Env-Ws 1008.01 through Env-Ws 1008.06	RSA 485-A:30-b
Env-Ws 1008.07	RSA 485-A:30-b, I (b) and (c)
Env-Ws 1008.08	RSA 485-A:30-b, II
Env-Ws 1008.09	RSA 485-A:30-b, I(d),(e),(f), (g)
Env-Ws 1008.10	RSA 485-A:30-b, I(g)
Env-Ws 1008.11	RSA 485-A:30-b, I(g)
PART Env-Ws 1009	RSA 485-A:29, I
PART Env-Ws 1010	RSA 485-A:29, I
PART Env-Ws 1011	RSA 485-A:29, I
<b>Provision of the Proposed Rule</b>	<b>Specific State Statute which the Rule is Intended to Implement</b>
PART Env-Ws 1012	RSA 485-A:29, I
PART Env-Ws 1013	RSA 485-A:29, I
PART Env-Ws 1014	RSA 485-A:34
PART Env-Ws 1015	RSA 485-A:29, I
PART Env-Ws 1016	RSA 485-A:29, I
PART Env-Ws 1017	RSA 485-A:29, I
PART Env-Ws 1018	RSA 485-A:29, I
PART Env-Ws 1019	RSA 485-A:29, I
PART Env-Ws 1020	RSA 485-A:29, I

PART Env-Ws 1021	RSA 485-A:29, I
PART Env-Ws 1022	RSA 485-A:29, I
Env-Ws 1023.01	RSA 485-A:34, III
Env-Ws 1023.02 through Env-Ws 1023.05	RSA 485-A:37
PART Env-Ws 1024	RSA 485-A:29, I
PART Env-Ws 1025	RSA 485-A:39